THE UNIVERSITY OF ALBERTA

PARTICIPATION IN SPORTS PROGRAMS AS A VEHICLE OF ACCULTURATION FOR INDIGENOUS NORTHERN YOUTH

by

© EDWARD THOMAS BENNINGTON

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled "Participation in Sports Programs as a Vehicle of Acculturation for Indigenous Northern Youth," submitted by Edward Thomas Bennington in partial fulfilment of the requirements for the degree of Master of Arts.

Robert G. Glassford
Supervisor

H. A. Scott

Arthur K. Davis

Date . . . . . .

DEDICATION

This thesis is dedicated to Ruth who gave much of herself to bring it to completion

ABSTRACT

The purpose of this study was to examine the impact of participation in organized sport programs, with different organizational patterns of the institutionalized relationship typical of sport, on the acculturative processes occurring among indigenous northern youth.

The following hypotheses were examined:

(1) Involvement in organized sport programs will induce acculturative processes resulting in an assimilation of southern values stressing competition, achievement orientation, and success.

(2) As the intensity of participant involvement demanded by a competitive sport program increases the participants will show a corresponding increase towards assimilation within southern society and its values stressing competition, achievement orientation, and success.

(3) The inclusion in an activity of elements of the traditional native culture will result in strategies of cultural adaptation characterized by a move towards cultural fusion.

Questionnaires and inventories measuring achievement orientation, professionalization, educational achievement, educational orientation, occupational aspiration, status mobility, vocational orientation, self-esteem, sociability

and dominance were administered to groups of indigenous non-participants, organized sport participants, TEST participants and non-indigenous non-participants.

The differences between indigenous male participants and non-participants on measures of achievement orientation and occupational aspiration provided support for accepting the first hypothesis with respect to male sport participation. Acceptance of the third hypothesis was indicated by the difference in vocational orientation of both males and females and by the difference in achievement orientation of male organized sport participants and male TEST participants. These findings give an indication of the impact of sport participation on acculturative processes.

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CHAPTER I

STATEMENT OF THE PROBLEM

Introduction

Sport in the Modern World

In their description and analysis of the rise of mass sport in this century, Goodhart and Chataway have categorized sport into four broad divisions.[1] These four categories, in order of their appearance in historical record, are: sport as exercise, sport as gambling, sport as spectacle and sport as representative (Goodhart and Chataway, 1968, pp. 2-4). Although a given sport may be placed in more than one, or even in all categories, it is the last form, representative sport, which is particularly characteristic of the modern world. Representative sport refers to the phenomena of individuals or teams acting as a representative of a larger group of people; thus a community hockey team competing in a league against other communities is typical of representative sport as are those individuals or national teams which compete in world championships and the Olympics.

With the exception of the ancient games of Greece and Rome which gradually placed more emphasis on representative sport (Gardiner, 1930, pp. 18-52; Harris, 1964, pp. 32-63), it is only the modern era which has seen the rise of sports

festivals described by George Orwell (Goodhart, 1968, p. 3) as, ". . . bound up with hatred, jealousy, boastfulness, disregard for all rules, and sadistic pleasure in witnessing violence--in other words, it is war minus the shooting."[2] The results of participation within these limited endeavors, which characterize representative sport are sometimes flaunted as proof of the superiority of a nation, a society, or a political ideology.

This view of sport has developed at a time when change is the predominant constant; it has become the prevailing core of man's perception of the world. The scope and scale of this change has been documented by Toffler, who comments (1970, p. 15), "In our lifetime the boundaries have burst. Today the network of social ties is so tightly woven that the consequences of contemporary events radiate instantaneously around the world." Sport has played its part in this "bursting" of boundaries which characterizes our world, such that midway through the twentieth century it was described as follows:

> It was popular in the sense that it pertained to the whole people and because of its universality was showing itself capable of bridging the gaps between Populace, Philistine, and Barbarian, between religious groups, between racial groups, and between many other divisions of society. (McIntosh, 1963, p. 96).

It has been an activity which has provided informal contact situations between cultures which were outside the limits of those formal contact situations which brought the cultures into contact[3] (Frederickson, 1969, p. 90).

Britain, because of her imperialistic and colonizing role in the modern era, provided many illustrations of sport functioning as a contact point in the networks of conjunctive relations[4] which formed the meeting ground of cultures. British sport was carried to and subsequently adopted by nations and cultures throughout the world. This has resulted in the development of a range of sporting legacies including the spread of cricket, rugby, and hockey through most of the Commonwealth, the exporting of rounders and rugby with subsequent modifications to America, and the adoption of association football throughout Europe (McIntosh, 1963, pp. 80-93). During the development of the British Empire there were few if any instances when sport was deliberately used as a vehicle of colonization (McIntosh, 1963, p. 81); sport was not the motivation which stimulated the original cultural contact.

Sport, in cultures encompassing the Protestant Work Ethic, changed in concept to reflect the values of achievement in worldly success and asceticism which were basic to this Ethic (Luschen, 1970, p. 89). The popularity of mass representative sport could only arise when the technological and social advancements had provided the masses with lifestyles which were no longer fettered to the process of work for material necessities (Pieper, 1952, pp. 50-51) and of which leisure formed an integral part (Maheu, 1968, pp. 170-71).

This new found leisure was also a prerequisite to the widespread expression of a change of attitude toward play and sport. The significant change in attitude, the one that differentiates the modern concept of sport from its predecessors, was that sport was now viewed as a societal institution (Kenyon, 1965, p. 24; Loy, 1969, pp. 56-71). This institutionalization of sport in society fostered a situation wherein sport was undertaken for its utilitarian value rather than for its own sake. Thus utility, a legacy of the emphasis on technology and the protestant work ethic, became a major characteristic and justification of sport. The adoption of this attitude in Great Britain and Canada can be shown by an examination of some of the efforts to provide sport programs and sport facilties.

In Britain, an early reflection of this utilitarian attitude can be found in the Education Act of 1918 which allowed local authorities to provide facilities "for social and physical training" of a greater proportion of the population. The utilitarian attitude was linked to sport in 1935 with the formation of the Central Council of Recreative Physical Training (McIntosh, 1963, p. 107). This emphasis on the use of sport as a means of physical training was reaffirmed in 1937 in the Physical Training and Recreation Bill which was justified in Parliament largely by its purported training and therapeutic effects. A National Fitness Council was established in 1939, but it was short lived and was repealed five years

later as a somewhat more liberal attitude allowed for a greater emphasis on the recreative aspect of sports. Despite this trend the attitude toward sport as a useful institution still underlies the acceptance of the recreative position. This is evidenced by the emphasis of the now well-known report of the committee chaired by Sir John Wolfenden ". . . that these activities may play their full part in promoting the general welfare of the community" (McIntosh, 1963, pp. 107-115).

In Canada this utilitarian attitude towards physical activity was expressed as early as 1909 when the Strathcona Trust Fund was established on a national level to aid in the incorporation of physical training in school curricula. This emphasis was maintained in the Youth Training Act of 1939. The Second World War revealed an alarming lack of fitness for military service which resulted in the National Physical Fitness Act of 1943 aimed at improving this condition (Munro, 1965, pp. 5-11).

In 1961 Bill C-131, a bill to promote fitness and amateur sport, linked the utilitarian basis placed by the Canadian government on physical fitness programs with sport (Van Vliet, 1965, p. 293). The vehicle for fitness development had shifted from the earlier physical training programs to the use of sport programs. The underlying assumption upon which the bill was based was that sports programs were instrumental in the development of physical fitness. As a concomitant it was assumed that national prestige could be

enhanced as a result of the development of a calibre of Canadian sportsmen able to compete successfully in international competition.

Governments have not been alone in creating this emphasis on the utilitarian value of sport. The business world has, with the use of marketing techniques, added a new dimension to this aspect of sport. In the latter case sport has been viewed as a consumer product with the utilitarian concept expanded to include the realization of a profit as its justification and its use. This approach has been brought to a peak in North America, where sport used in this way is most characteristic of the sporting scene of the United States. The British utilitarian emphasis is focused on fitness and character development. Canadian sport, influenced by both countries, tends to combine these emphases such that the Canadian view of sport is midway between the British and the American (Munro, 1965, p. 11). In recent years sporting developments in Canada have tended to resemble the business approach characteristic of the United States.[5]

This emphasis upon representative sport has had a major consequence for sport development in that it has fostered the growth of mass spectator sport. Affleck et al., (1970) describe the social milieu of the western world which has fostered the development of many forms of alienation, one form being the rise of mass spectator sport as the dominant form of sport.

> This alienation has helped in the formation of the radical minority bent on violent revolution, the birth of the hippie and his commune, and the seeking of

> reality and meaning in life through the drug culture. More specifically to our case is the development of mass spectator sports, at the loss of the ideal goal of large scale active participation (Affleck et al., 1970, p. 2).

Sport in the modern world has become a societal institution, dominated by the institutions of government, education, and business. These institutions have stressed the utilitarian aspects of sport and physical activity and fostered the growth of representative sport which involves a small number of individuals and has given rise to the phenomena of mass spectator sport. The use of the utilitarian rationale as motivation and the pervasive dominance of the representative sport have worked against the development of large scale active participation and fostered vicarious involvement typified by the phenomenon of mass spectator sport. The typical view of sport carried into the North from southern Canada has been that of representative sport with a utilitarian rationale. This view of sport has dictated the nature of change in sport throughout the North.

Sport in the Mackenzie Delta of the Northwest Territories

The major characteristics of the indigenous people in the Mackenzie Delta have been delineated by Glassford (1970) in his examination of the organizational patterns of their games as a reflection of changes in the organizational patterns of economic behavior. This was done by comparing the game preferences of Eskimos[6] of various ages. The subjects were

classified into three groups by age: the "traditional" generation consisting of individuals fifty years of age or older, the "cultural-conflict" generation including those individuals of twenty-five years to forty-nine years, and the "new era" generation whose ages ranged from ten to twenty years of age. These divisions correspond with major historical changes in the degree of influence of southern Canada on the people of the North.

The findings of this study indicate a strong generational division between the "new era" generation and both older generations: the "new era" generation showed a strong affinity for competitive games learned in the new social milieu of the changing North. The older generations preferred cooperative and individual self-testing games that had been learned from familial sources (Glassford, 1970, pp. 246-47).

These findings indicate that, in terms of sport, the modern concept of sport emphasizing utility and fostering the growth of representative sport may seem as characteristic of the "new era" generation. Sport programs aimed at this generation throughout the North are largely the result of government sponsorship with a most pervasive influence occurring within the schools and their associated hostels. This is due largely to the scale and scope of contact that is made with the "new era" generation through these institutions. Sport programs in this context are used very much as they are in southern Canada in that their primary functions are for fitness

development and as socialization and social control; the other educational aims are generally of secondary importance to these.

Programs outside of the school are more limited in scope, in the variety of activities offered and the number of individuals involved. Programs of this nature, at least those sponsored by the government, often include as a part of their justification the point that they are a means by which the indigenous people may adapt to the impinging southern culture (Vallee, 1971, p. 157).[7]

In the Mackenzie Delta the Territorial Cross Country Ski Training Program, commonly known as TEST, is representative of such a program. The emphasis of the program on this acculturative aspect can be shown by an examination of its aims which are as follows (TEST Program Report, 1968, p. 2):

1. To investigate if Indian and Eskimo youth in the Yukon and Northwest Territories can be motivated to higher general achievements as students and citizens through participation in competitive athletics.

2. To develop a cross country skiing program for northern youth that will provide meaningful athletic motivation and involve maximum personal effort.

3. To investigate the potential of the northern youth for making the best of their environment and excelling in competitive cross country ski racing at national and international level.

The implications of these aims are stated more succinctly in two long range goals put forward by the TEST committee (TEST Program Report, 1968, p. 2).

1. To give Indian and Eskimo youth a chance to compete in the MODERN world in a field where they have sufficient environment, culture and understanding to excell to greatness.

2. To explore if northern youth participating in an activity, where they have the ability to succeed, can be motivated by their success for greater general achievements and determination in life itself.

It can be seen in the focus of these aims and goals that the concern of TEST was to enable northern youth to cope with the encroaching southern culture with its emphasis on competition and individual achievement. Although each of the aims and goals stress this adaptation to achievement orientation, another feature of considerable importance is the attempt to utilize an activity which was viewed as being in harmony with the cultures of northern peoples. The underlying rationale of the program as given in the long range goals point out the concern that the program originators had for finding an activity in which indigenous youth would have "sufficient environment, culture, and understanding" (TEST Program Report, 1968, p. 2) to facilitate success. The term "environment" in this case appears to be used as a concept in a similar way to that used by Cohen wherein environment was thought to encompass more than the physical habitat. Rather it was viewed as including that part of ". . . the total system of components to interact with each other and that characterize a group of population (1968, p. 3)." This feature of TEST broadens the scope of its concern in comparison with other sport programs. Given that the adaptation of a population incorporates its

relationship to its habitat (Cohen, 1968, p. 3), then TEST was an attempt to utilize the total environment of northern youth, their ecosystem as it were, to facilitate their adaptation to the changing social milieu of the north.

TEST can be further differentiated from other sports programs in that the commitment required by the participants, because of the intensive training necessary, was considerably greater than that which occurred in other sports programs. This is largely a result of the program's orientation towards producing skiers of national and international calibre. The TEST program can be described as the use of an activity which relates to elements of traditional northern culture and the contemporary environment of northern youth in order to facilitate the cultural adaptation to the achievement oriented society of the south.

Other organized sport programs throughout the Mackenzie Delta had been organized through the schools. These intra-mural and extra-mural programs utilized a wide range of southern Canadian activities with an emphasis on the team sports of indoor soccer, hockey, volleyball, and basketball.

These programs differed from the TEST program in that they did not have the strong association to traditional cultural activities which was an inherent part of the TEST activity. Since they were conducted through the schools, largely utilizing the southern staff teaching in the schools, they tended to reflect a greater degree of the southern influence of the

educational institution than did the southerners who were involved in the TEST program. Finally they did not involve the same degree of commitment since the training required to participate successfully was not nearly as intense as that of the TEST program.

The programs above give a representative view of sport and sport programs throughout the Mackenzie Delta. They illustrate the emphasis placed on acculturative and socialization aspects and show the variety and the range of approaches which have been used to achieve these acculturative objectives. There exists, then, the opportunity for a range of involvement from non-involvement to the intense involvement of international competition. The motivation for involvement ranges from rewards based on the values of achievement-oriented southern society to rewards based on the relationship of the activity with the traditional value structure.

The Purpose of the Study

The purpose of this study was to examine the impact of involvement or non-involvement in sport programs on selected aspects of the social-psychological characteristics of the indigenous youth living in the Mackenzie Delta. To accomplish this, three categories of participation in sport programs with levels of involvement from non-involvement to the intense involvement of national and international competition were compared on a series of measures which indicate an adaptation

to the cultural necessities imposed on the north by influences from southern Canada. The TEST program was used as representative of a program with an intense orientation towards cultural change in terms of competition and achievement. A confounding factor was that it incorporated features not characteristic of all sport programs demanding such involvement. These features included a close involvement with the natural habitat, elements of self-testing which were inherent in the activity and it provided strong links with elements of the traditional cultural heritage that tended to be largely inaccessable for most members of the "new era" generation. Thus, a subsidiary problem involved an analysis to ascertain the influence of these features, if any, on the process of acculturation of the participants in the TEST program.

These considerations have led to the formation of the following hypotheses:

1. Involvement in organized sport programs will induce acculturative processes resulting in an assimilation of southern values stressing competition, achievement orientation, and success.

2. As the intensity of participant involvement demanded by a competitive sport program increases the participants will show a corresponding increase towards assimilation within southern society and its values stressing competition, achievement orientation, and success.

3. The inclusion in an activity of elements of the traditional native culture will result in strategies of cultural adaptation characterized by a move towards cultural fusion.

Justification of the Study

Currently within the social sciences there exists a growing school of thought which is concerned with the interaction of the components which constitute man's environment. This focus on process is largely a result of the inability of the structuralists' homeostatic model to account for sociocultural evolution. Society, culture, and personality when viewed as complex adaptive systems have as their foci the ongoing micro-processes underlying structural manifestations at a given moment in time. The process view, Buckley pointed out, is able to account for the following fact:

> Persistence or continuity of an adaptive system may require, as a necessary condition, change in its structure, the degree of change being a complex function of the internal state of the system, the state of the relevant environment, and the nature of the inter-change between the two (1968, p. 493).

Acculturation is the result of processes of cultural adaptation and adjustment in the conjunctive network between cultures. Conjunctive networks are maps of the contact points where these processes are acting at a particular moment in time (S.S.R.C., 1954, pp. 980-84). These networks do not have structural integrity over time but reflect the ebb and flow of the acculturation processes. Games, and their specialized form commonly labelled "sport", are one such contact point in the conjunctive network between the traditional culture of the northern native and the culture of southern Canadians.

Glassford, in his analysis of games in the transitional Eskimo culture of the north, has documented the cultural evolution of organized patterns of both economic behavior and games. His findings of changes in the organizational patterns of economic behavior in the "cultural conflict" generation and subsequent changes in organizational patterns of games in the "new era" generation provided some evidence supportive of Cohen's contention that cultural evolution involved ". . . not only changes in sources of energy but also alterations in social institutions, and the evolutionary record suggests that more time is required to effect the latter than the former (1968, p. 60)."

Cohen suggested that this type of formulation documenting alterations in man's physical and social environments is characteristic of research dealing with adaptation. He made a further suggestion that each culture is a unique environment and that adaptations uniquely change these environments. Cohen contended that the effect on man of each of these adaptations is a useful research question but it is usually neglected in the research of adaptation (1968, p. 48). This concern with how man is shaped by the constructs he imposes on the habitat is a valid research strategy in studying the process of adaptation. This study focused on this process element of adaptation as it examined the effects of the adoption of different organizational patterns in the institutional relationships typified by sport and games.

Limitations of the Study

Goldschmidt (1968, p. 242) in a description of the broad based research of the Culture and Ecology Project commented that the ". . . real world is an imperfect laboratory; there are large and cumbersome variables which intrude themselves upon the best laid field research plans." This study was an examination of a situation in the real world, and as the research progressed it became obvious that, because of the limited population from which the sample was drawn, modifications of the matched design in the research plan were necessary. Even with these modifications some categories within the design would not be as representative of the various groups as would have been desired. While this reduced the degree and range of the generalizations to be drawn from the study, it was felt that this limitation did not invalidate the results obtained. The value of field studies is that they provide the data necessary for validation and verification of theory, and provide for the application of theoretical perspectives to reality. These considerations support the validity of research of this nature.

This study made use of a questionnaire approach in the collection of data. Some of the questions asked for verbal or written responses about overt actions that the subject may make. These verbal responses and overt actions are based on the attitudes of the subject. Research has frequently shown

a lack of correspondence between the verbal response expressed and the elicited overt response (Deutsher, 1966, pp. 235-254; Defleur, 1970, pp. 2292-9--2792-12).

A final limitation of the study was that the instruments used were inherently culturally biased in favour of the values and attitudes of the southern cultural milieu. Efforts were made to eliminate the cultural bias based on vocabulary and the experiential limitations of the native northerners. The study utilized the cultural bias of these instruments in terms of their orientation to southern values to assess to some extent the degree of acculturation to southern society that had occurred in native youth. Despite these efforts to overcome the cultural bias of the instruments due to vocabulary, a major limitation of the study was that the meaning of the data collected might well have been obscured by cultural differences.

Delimitations of the Study

The study has been delimited as follows:

1. The sample was drawn from the schools in the town of Inuvik which is the site of the Mackenzie Delta's centralized secondary school and the organizational center to the TEST program.

2. In the analysis, males and females were analysed separately thereby controlling for sex differences which would confound interpretation because of differences in social and

cultural roles and expectations.

3. In the attempt to attain a matched design the sample was limited to 149 subjects consisting of seventy-five females and seventy-four males.

Definition of Terms

Indigenous Youth. An Indian or Eskimo youth whose bloodlines could be traced back to Indian or Eskimo ancestry.

TEST Participant (TP). A male or female indigenous northern youth who was or had been involved in the TEST program for at least one season.

Other Sports Participant (OSP). A male or female indigenous northern youth who was currently involved in organized sport other than TEST.

Non-participant (NP). A male or female indigenous northern youth who was not currently involved in any sporting activity.

Non-indigenous Non-participant (NNP). A male or female non-indigenous northern youth who was not currently involved in any sporting activity.

Organized Sport. Any sport in which there was organized practice and regularly scheduled competitions.

Self-esteem. That personality characteristic which is measured by Rosenberg's self-esteem inventory (1965) which indicates attitudes regarding self-worth, self-pride, self-respect, self-satisfaction, usefulness of self; these self-attitudes generally indicate self-esteem.

Achievement Orientation. That personality characteristic which is measured by the Rosen Achievement Motivation Inventory (Rosen, 1965) to differentiate the "activistic, individualistic, future oriented" (achievement) individual from the "passivistic, familistic, present oriented" (non-achievement) individual.

Academic Aspirations. The highest level of academic training to which the individual aspired.

Academic Achievement. A letter grade based on the academic record of the 1971-1972 school year.

Professionalization. An attitude measure devised by Webb (1969) that utilizes the relative importance of value orientations to skill, equity and victory to differentiate individuals who are "professionally oriented" from those who are "play oriented."

Occupational Aspirations. A score assigned to the occupation to which a subject aspired using the Blishen Canadian Occupational Scale (Blishen, 1967).[8]

Status Mobility. The difference between the Blishen Canadian Occupational Scale status of the individual's aspired occupation and the present occupation of the head of that individual's household.

Vocational Orientation. A classification system which uses the apparent orientation towards indigenous or southern cultural values to classify individuals according to their aspired occupations.

Sociability. That personality characteristic measured by those items of the Cattell 16 Personality Factor Inventory (Cattell, 1957) which differentiate an "outgoing, warm-hearted, easy going, participating" (sociable) individual from a "reserved, detached, critical, cool" (unsociable) individual.

Dominance. That personality characteristic measured by those items of the Cattell 16 Personality Factor Inventory (Cattell, 1957) which differentiate an "obedient, mild, accommodating conforming" (non-dominant) individual from the "assertive, independent, aggressive, stubborn" (dominant) individual).

FOOTNOTES CHAPTER I

[1]In this study sport is viewed as a social institution in which distinctive value orientations and interests center on important social concerns and generate or are accompanied by distinctive modes of social interaction in the form of institutionalized games (Loy, 1969, pp. 62-68).

[2]Exceptions have come to light as a result of research into the sports and games of earlier cultures and societies, for example; the rubberball games of Meso America circa 500 A.D. to 1600 A.D. (Cox, 1967, p. 15). However, sport was not used in this way to the extent which it has been used in recent times.

[3]These were formal contact situations in that they had become institutionalized as acceptable forms of relationships between cultures. Examples are found in the historical imperatives which brought various cultures into contact, such as the establishment of colonial empires for the purpose of trade. Sport has recently become an institutionalized form of contact between cultures as is evidenced by the existence of national and international sport festivals and the importance attached to them.

[4]At any given time the network of conjunctive relations between cultures is a map of the points of contact at which acculturation processes are occuring (S.S.R.C., 1954, p. 980).

[5]This is partially a reflection of American takeover of Canadian resources and enterprizes such as the National Hockey League (Kidd, 1972) and is possibly indicative of acculturative changes occuring in the Canadian sporting scene.

[6]The people commonly referred to as "Eskimos" prefer to be known as "Inuit". "Inuit" is a word from their language whereas "Eskimo" is a word from an Indian language (an Algonquian Indian word) meaning "eaters of raw meat" which carried a slightly derogatory connotation (Gove, 1961, p. 755). The Algonquians used this word "esquimantsic" to refer to the people north of them. The Cree have a similar word "askimowew" meaning "he eats it raw".

[7]This statement is not meant to imply that the Inuit necessarily perceive this as desirable.

FOOTNOTES (Continued)

[8]This analysis used the Blishen Canadian Occupational Scale of 1967 to assign scores with respect to occupational aspiration and aspired status mobility. A revision of this instrument has since been published. The new scale rates 500 occupations whereas the old had rated only 320. The coefficient of correlation between those occupations classified on both scales was 0.97 (Blishen et al., 1976, p. 73). As the occupations of the sample were classifiable using the old scores for occupations found on both scales the data was not re-analysed using the new data scale.

CHAPTER II

A CULTURAL GROUP IN TRANSITION

This chapter has been divided into two sections. The first section makes explicit those concepts and theories in social science which are implicit in the design of the study. The second provides a cultural perspective on the nature of the acculturative process in the Mackenzie Delta region of the Northwest Territories.

A Theoretical Perspective On Acculturation

To study the phenomena of acculturation it is important to have an understanding of what is meant by the concept of culture.[1] Unfortunately within the social sciences there has been a great deal of disagreement about theory and theoretical perspective in the study of social phenomena (Buckley, 1968, p. 490; Geertz, 1968, p. 24; S.S.R.C., 1954, p. 973). This is particularly true of the concept "culture."[2] Given this situation, a researcher must choose an appropriate theoretical approach from one of the disciplines. Basically this study used an anthropological viewpoint, as this appeared to provide the broadest theoretical perspective encompassing the social phenomena of acculturation.[3]

Weiss, in his attempt to delineate a scientific concept of culture, characterized "a cultural system", a phrase which

he used interchangeably with "a culture", in the following way:

> A cultural system, then, consists of (1) a set of material components that includes (a) a set of human components (the members of a human society) and (b) a set of nonhuman components (the artifacts comprising the material culture); (2) an organizational network of interrelationships and interactions binding together (or linking) the material components of the system, both human and nonhuman; (3) a set of modifications imposed by the operation of the system upon the material components, adapting them to function properly--to look and act as they should--within the system, this set of modifications being divisible into (a) a set of physical modifications (changes in form or chemistry) imposed mainly on the nonhuman components of the system, and (b) a set of neural modifications (language, ideas, attitudes, skills) imposed mainly on the human components (1973, p. 1384).

This general characterization outlines the elements which constitute a cultural system but provides little insight into the process through which cultures develop or change. Cohen, who views cultural development and change as an evolutionary process, drew on the different ways in which anthropologists have conceptualized culture and found seven points of agreement. First, culture refers to the full range of behavior in a group, not just to the literature, music, drama, and art. Second, all aspects of a culture (aesthetics, law, language, religion, personality patterns, therapeutics, kinship, attitudes towards equality and change and the like) are closely interwoven into a pattern that is unique to each group. Third, cultures change as a result of forces within the culture (innovations) and of contact between cultures that create new challenges and problems. Fourth, every culture

is a set of symbols. Fifth, all social life takes place in groups and the social group must be regarded as the adaptive unit in studying cultural adaptation. Sixth, each culture is not characterized by a set of inflexible rules about how given activities are conducted but rather each has a range of permissible behaviors. Finally, each culture, through the use of specific cultural techniques and procedures, is transmitted from generation to generation (Cohen, 1968, pp. 7-10).

From this conceptualization of culture, Cohen used an evolutionary perspective in which he viewed cultural changes as processes of adaptation or adjustment. A population's adaptation is conceptualized as the processes by which it alters its relation to its habitat (utilization of new energy sources), whereas its adjustments are changes in the customary behavior of a group (social institutions) which do not appreciabley affect the group's relationship with its habitat (Cohen, 1968, p. 4). He differentiates between habitat and environment as he develops a taxonomy of cultures at different levels of evolutionary adaptation, from hunting and gathering through industrialism, where successive adaptations are characterized by the introduction of new sources of energy into a habitat (Cohen, 1968, pp. 40-60). For Cohen habitat and environment overlap to a considerable extent. But environment is more than a habitat, a group and its adaptations; it includes the adjustments resulting from the adaptations (1968, p. 4).

An environment is ". . . the total system of components that interact with each other and that characterize a group of population" (1968, p. 3). Thus Cohen's idea of environment is the same as Weiss' characterization of a culture system.

Cohen outlines four sources of cultural evolution or change: technical innovation, political innovation, population growth and contact between groups (1968, p. 45). Thus cultural change originates either from innovation, increasing social complexity or contact between groups. The present study is interested in the process of change called acculturation. Acculturation was defined by a Social Science Research Council Summer Seminar as: ". . . culture change that is initiated by the conjunction of two or more autonomous cultural systems" (S.S.R.C., 1954, p. 974). An autonomous cultural system was defined as ". . . one which is self-sustaining--that is, it does not need to be maintained by a complementary, reciprocal, subordinate, or other indispensible connection with a second system" (S.S.R.C., 1954, p. 974). Conjunction is the network of relationships between cultures through which the actual contact occurs. The way in which acculturation fits into the preceding conceptualization of culture development and change is shown in the following statement:

> All the evidence leads to the conclusion that any autonomous cultural system is in a continuous process of change. The change that is induced by contact therefore does not represent a shift from a static to an active state but rather a shift from one sort of change to another. Contact often stimulates change more adventitiously, more generally, and more rapidly than do internal forces (S.S.R.C., 1954, p. 984).

Thus, acculturation is a concept which embodies those processes acting between autonomous cultural groups in contact and resulting in change. The four distinct processes which occur during acculturation that have been outlined are: (1) intercultural transmission (diffusion), (2) cultural creativity, (3) cultural disintegration, and (4) reactive adaptations (S.S.R.C., 1954, pp. 984-7).

Intercultural transmission involves the passing of cultural materials (objects, traits, or ideas) between cultural systems in conjunction through diffusion. Two features of the diffusion of such material are:

> . . . (1) that the patterns and values of the receiving culture seem to function as selective screens in a manner that results in the enthusiastic acceptance of some elements, the firm rejection of other elements; and (2) that the elements which are transmitted undergo transformations in the receiving cultural systems, and may also undergo transformations within the intercultural network while in the process of being transmitted. At any rate, these transformations are also probably intimately related to the value systems of receptor cultures (S.S.R.C., 1954, pp. 984-5).

Cultural creativity is suggested as a process of acculturation in that the conjunction of differences between cultures can act as a catalyst for cultural creativity. The utilization of cultural material from an alien culture can involve "reorganizations," "reinterpretations," and "syncretism" which essentially produce new cultural elements within the culture which receives such material.

Cultural disintegration, the collapse of an autonomous cultural system, is a potential outcome of any conjunction

between cultures, but is particularly likely when the incorporation of new materials is forced on the receiving group. Coercion in this manner tends to inhibit the creative reassociation necessary for the cultural system to maintain its integrity.

One other possible negative adaptation, when force or coercion does not overwhelm a culture, is withdrawal. These reactive adaptations tend to encyst the values existing within the culture and to break down these elements of the conjunctive network which induce the conflict relative to the traditional viewpoint of that culture.

If neither withdrawl nor disintegration occur when cultures are in conjunction, they must either continue a progressive adjustment or develop a stabilized pluralism (S.S.R.C., 1954, p. 987). Stabilized pluralism is the arresting, or at least the extreme slackening, of the process of progressive adjustment. The cultures involved maintain their autonomy and there often results an institutionalization of relationships which form the conjunctive network (S.S.R.C., 1954, p. 990).

Progressive adjustment takes place through cultural fusion or assimilation (S.S.R.C., 1954, pp. 987-90). Cultural fusion occurs when a third autonomous sociocultural system forms in part or all of the area of contact, while assimilation is a unilateral adoption of the essentials of one culture or another. The full realization of either of these states is

extremely rare; the usual occurrence is a stabilized pluralism developing at various stages of the process.

The Social Science Research Council Summer Seminar on Acculturation identified four principle facets of the phenomena acculturation with a view to understanding acculturative processes and to the structuring of research strategies dealing with acculturation. These are: (1) the characterization of the properties of the autonomous cultural systems which are in contact; (2) study of the nature of the contact situation; (3) analysis of the conjunctive relations established through the contact; and (4) the study of the processes resulting from the conjunction of the systems (1954, p. 975). This format will be used to structure the discussion of acculturative processes occurring in the Mackenzie Delta of the Northwest Territories.

Acculturative Processes In The Mackenzie Delta

Characterization of the Cultural Systems

Before developing a characterization of the properties of the cultural systems which were the focus of this study, it was imperative to establish that these are autonomous cultural systems. In the view of the Social Science Research Council,

> . . . cultural changes induced by contacts between ethnic enclaves and their encompassing societies would be definable as acculturative, whereas those resulting

> from the interactions of factions, classes, occupational groups, or other specialized categories within a single society would not be so considered. Hence, socialization, urbanization, industrialization, and secularization are not acculturation processes unless they are cross-culturally introduced rather than intraculturally developed phenomena (S.S.R.C., 1954, p. 974).

Historically, the indigenes of the Mackenzie Delta belonged to numerous tribal and cultural groups; however, in the sociocultural context of the north at present:

> . . . the trend among native peoples, particularly in the burgeoning settlements, is toward cultural uniformity. Traditional differences between various Eskimo groups and among Eskimos, Indians, and Metis become blurred. Reasons for this blurring among previously differentiated groups are the sharing of a similar social and economic position vis-à-vis the outsiders and exposure to the non-native way of life in schools and in the spreading mass media (Vallee, 1971, p. 158).

The recent concern and organization of native groups with respect to obtaining "just land settlements" and the furor created by the "Dene Declaration" in which diverse native groups characterized themselves as "the Dene Nation" (Canadian Association in Support of Native Peoples, March 1976) provides evidence that the native peoples of the north are tending to view themselves, despite their differences, as an ethnic enclave within Canadian society.[4]

Thus, it would appear valid to consider, both in terms of the historical context and in terms of the indigenous peoples of the Mackenzie Delta forming an ethnic enclave encompassed by "Canadian society", that the processes of change occurring in the Mackenzie Delta are a result of acculturative

processes.

Traditional life in the north was based on patterns of cooperation and reciprocal expectations while individualistic competition, which was an important aspect of traditional culture, was kept in check by sanctions and social expectations, such as, the importance of the virtue of modesty, and the expectation of only good-natured rivalry (Chance, 1971, p. 278). Although this was particularly true for the Eskimo who lived under extreme ecological pressure in the high arctic, it differed, for the most part, only in degree to that of the indigenous groups who lived in subsistence cultures throughout the rest of the north (Lubart, 1969, p. 2).

Despite the breakdown of cooperative effort and reciprocal sharing patterns under the pressure of the technological and economic opportunities in today's north, many of the underlying mechanisms of social control which operated to limit competition and achievement still seem to function, even though these attitudes may not have a positive adaptive value (Lubart, 1969, p. 36). An example of this is cited by Glassford as a major factor governing the performance of TEST skiers; those who started to improve faster than others were apparently quietly put under pressure to wait for the others to catch up (1971, p. 229).

Achievement and competition, despite the pervasive influence of changing northern society in which they are acceptable and positive attitudes, appear to be an area of

significant cultural differences which might be expected to be undergoing cultural change. Achievement orientation and aspiration, as well as success in southern oriented institutions, are measures which indicate the degree to which southern values have been adopted by northern youth. Thus, these measures are indicative of the degree of acculturation of the various groups of northern youth examined in this study.

The Contact Situation

A historical overview of the contact between the southern Canadian and northern native cultural systems shows a gradually increasing dependence on the burgeoning western technological culture. This has been documented by Vallee (1971). Hughes (1965), and Jenness (1964). Hughes briefly outlined the precontact culture of the indigenes north of the tree line as follows:

> The orientation to sea-mammal hunting, alternating (where conditions warranted) with inland caribou hunting; fishing as a seasonal pattern; collecting and gathering of various food items; migratory settlement patterns; indigenous technology; highly animistic, relatively unformalized religious institutions, with many taboos and ritual perscriptions and the shaman often the most important socio-political leader as well as religious figure; relatively "loose" social organization in the sense of few sharply specified behavior patterns or kinship-political social units; and the development of hunting and sharing partnerships of various types (1965, p. 13).

The initial contacts made with these peoples, by explorers, had minimal effect on the indigenous cultures. Following this, contacts with whaling crews and later explorers

resulted, for the most part, in the introduction of material technology and disease and induced the first changes in the basic economy and social organization of their cultures. These changes were the result of a primary shift in life style with hunting, trapping, and providing local labor for the newcomers as the economic focal point and the development of more permanent villages which allowed the native people to remain closer to their source of the new material technology.

With the decline of contacts with whalers at the turn of the century, the native people who had established more permanent settlements turned to trapping to obtain those technological items which had become necessities to their way of life and their villages were re-established near the Hudson Bay Company trading posts which expanded into the vacuum left by the departing whaling crews. The traders were followed by missionaries and police. This triumvirate of agencies altered in many ways the ideas and practices of the indigenes which fell within their respective mandates and left other aspects of the northern way of life as they were.

With the influx of other sources of income (wages, transfer payments, relief, family allowances) resulting from the massive influx of the military (construction of the Distant Early Warning Line) and commercial interests (economic and resources development) and Government intervention (establishing sovereignty) following the Second World War,

the indigenes became consumers largely independent of their traditional producer roles.

While this was occurring Government programs of development and education have largely ignored the values, culture, and wishes of the indigenous population (Vallee, 1971; Jenness, 1964; Hughes, 1965). Government programs of community development have often resulted in the destruction of the subsistence economy which has necessitated the subsidizing of the community, usually through welfare (Usher, 1970; Crowe, 1969). Vallee presented the following critique of Government policy in northern development:

> Statements of government spokesmen about respecting native cultures notwithstanding, the evidence shows that cultural replacement is the goal of the most important programmes which have been introduced by government.
> The health programme for instance, aims at changing customary practices and attitudes towards foodways, bodily care, housing, mental illness, and santitation. The sweeping educational programme has hardly any relevance to traditional culture and quite deliberately excludes adult generations in order to transfer the youngsters (1971, pp. 157-8).

The result of these programmes is:

> . . . that those manifest features of a culture which serve as reference points for identification as a distinctive group are dwindling rapidly. Apart from physical characteristics, standard of living, and style of living, it is only language which continues to mark off unmistakenly those who are native from those who are not. No programme recognizes the native languages as an important component (Vallee, 1971, p. 158).

Davis, in a study of the Indians of northern Saskatchewan, outlined the consequences of that province pursuing policies emphasizing cultural pluralism and local self-development

in areas lacking social and economic potential. The populations in such areas are left with two choices; continued dependency and semi-isolation or relocation to take up a place in the mainstream of the Canadian way of life (Davis et al., 1965, pp. 352-4).

The effect of these programs and policies in the Canadian north has had two major impacts for a majority of the indigenous population. The first is that a great deal of the indigenous culture has been rendered obsolete by the standards and technology of the impinging southern culture.[5] Few, if any, approaches which value aspects of the indigenous way of life have been used. Given the marked superiority of the technology of the southern culture, the traditional cultures have become regarded as inferior by the indigenous population. This attitude, which creates a great deal of psychological disturbance for individuals,[6] has sown the seeds of cultural conflict which could result in cultural disintegration (Lubart, 1969).

The second major impact focuses on the social roles which are open to indigenes in northern society. Lewis has described the conditions which he feels are characteristic of sociocultural situations which foster the development of what he calls the "culture of poverty". The "culture of poverty" is described as:

> . . . both an adaptation and a reaction of the poor to their marginal position in a class stratified, highly individuated, capitalistic society. It

> represents an effort to cope with feelings of hopelessness and despair which develop from the realization of the improbability of achieving success in terms of the values and goals of the larger society (1968, p. 408).

The conditions which foster the development of this situation are:

> . . . (1) a cash economy, wage labor and production for profit; (2) a persistently high rate of unemployment and underemployment for unskilled labor; (3) low wages; (4) the failure to provide social, political and economic organization, either on a voluntary basis or by government imposition, for the low-income population; (5) the existence of a bilateral kinship system rather than a unilateral one; and finally (6) the existence of a set of values in the dominant class which stresses the accumulation of wealth and property, the possibility of upward mobility and thrift, and the explanation of low economic status as the result of personal inadequacy or inferiority (1968, p. 408).

It is interesting to observe that these conditions largely characterize the position of northern indigenes vis-à-vis the southern culture. Lubart's (1969) study dealing with psychodynamic adaptive problems and studies which document the movement from a subsistence life style to dependence on a subsidized (welfare) economy (Usher, 1970; Crowe, 1969) provide evidence that this adaptation is taking place in the north as the traditional culture shows signs of disintegration.

This picture of cultural disintegration will not necessarily be the result of continued northern development. The native peoples have become aware of the problems facing the continuity of their culture. This is evidenced by recent demands put forth in the "Dene Declaration" and by their stand on the problem of a land settlement with the government

(Canadian Association in Support of the Native Peoples, March 1976). The indigenous people appear to be calling for the recognition of their way of life and demanding changes which would allow native cultures to co-exist in a state of stabilized pluralism with the southern culture.

There is some hope for success of such an endeavor in that the population of the Northwest Territories is predominately native, coupled with signs of awakening political awareness and the development of organizations necessary to deal with southern bureaucracies, and given the guilt of some southern Canadians[7] over the treatment of native peoples in the settlement of North America.

Conjunctive Relations

The nature of the conjunctive relations formed as a result of contact have been outlined in the preceding historical review of the contact situation. The network of conjunctive relations, which formed the environment of the young people who were the subjects for this study, had as its focal point the southern oriented school system, its associated hostel system and the organized sport programs of the community. The result of this situation was to maximize the impact of the southern culture while minimizing the influence of the traditional culture.

The one element under examination in this network of conjunctive relations was the participation in sporting

activities typical of the southern culture by members of the "new era" generation of the indigenous population. These activities focus on a value complex which is centered around achievement and competition; whereas the value structures of the indigenous population appear to have retained traditional structures which control achievement and channel competition to meet cooperative necessities. This provides a situation in which research into the acculturative process can most profitably be undertaken as it meets the criteria and avoids the difficulty outlined in the Social Science Research Council seminar dealing with acculturation research which stated:

> If attention is not centered on the conjunction of markedly different cultural traditions, the analyst is confronted with affects too microscopic to yield to existing techniques of analysis. For the present it would seem to be more fruitful to concentrate upon the conjunction of cultural differences that are wide and deep (S.S.R.C., 1954, p. 947).

Processes of Acculturation

The purpose of the examination of the various achievement, achievement orientation, and social-psychological indices selected for study, is to provide insight into the processes of acculturation occurring among northern youth in the Mackenzie Delta.

FOOTNOTES--CHAPTER II

[1]In the work done by the Social Science Research Council Summer Seminar on acculturation (1954) this was not done. They defined an autonomous cultural system. The definition only dealt with what made a cultural system autonomous and made no attempt to characterize what constituted a cultural system or to define what was meant by the term culture.

[2]Weiss discussed the different approaches to culture used by anthropologists and sociologists that resulted in the formation of the disciplines of cultural anthropology and social anthropology (1973, pp. 1379-89). Cohen documented the difficulty which anthropologists have had in delineating the concept of culture.

[3]Anthropology is particularly concerned with the study of culture whereas the other social sciences are more concerned with an examination of phenomena using concepts which are not as inclusive as culture.

[4]"Dene" is the word chosen by the Indian peoples of northern Canada to identify themselves as a group in the ethnically plural society of Canada.

[5]Predicted by Davis (1965, p. 353).

[6]Davis also cited evidence for this in the deviance patterns which exist in native communities in northern Saskatchewan (1965, p. 353).

[7]Not all southerners feel a sense of guilt, but many recent presentations to the Berger Inquiry in its visits to southern Canadian cities supports the view that many southern Canadians feel compelled to support the native claims of past injustice.

CHAPTER III

METHODOLOGY

The study was conducted as a part of a research team from the University of Alberta which was invited to evaluate the Territorial Experimental Cross-country Ski Training (TEST) Program. The fact that the invitation was extended by Northerners was a decided advantage in conducting the research given the trend toward resentment of researchers which has tended to exist among northerners, particularly indigenous northerners. This resentment centers around the fact that much of the research that has been undertaken in the north has been oriented to southern needs and that it has had little apparent relevance to the needs and problems of northerners. Since the primary purpose of the research team was to provide feedback with respect to felt needs, the people of the north extended their assistance and cooperation without which it would have been impossible to have effectively collected the data. This data was used to evaluate the TEST Program in terms of the aims and objectives of the program (Glassford et al., 1973, p. 4). Some of the data collected in this study gave a social-psychological profile of groups of "new era" northerners with various degrees of participant involvement in organized sports programs. This study used this data to investigate the nature of the

acculturative processes which occurred as a result of sports participation.

Data Collection

In November of 1971 a questionnaire was administered to a representative sample of Inuvik school students to pre-test and assess the meaningfulness of the instruments. Where difficulties in phraseology or vocabulary were experienced by the students in the pilot study changes were made in the instruments in an attempt to clarify the meaning of the item. The revised questionnaires were then re-administered and this process continued until the items were comprehensible. Items which could not be rendered comprehensible because of cultural and experiential difficulties were eliminated.

With the cooperation of the respective principals of the primary and secondary schools, forms which elicited information with respect to sports participation (See Appendix A) were administered by the school staffs in February 1972. The information obtained was used to select the sample for the groups of the research design.

The questionnaires containing the instruments were administered in May 1972 to the selected sample. This was done with small groups of subjects over the course of a week in conjunction with other aspects of the TEST Program evaluation.

Research Design

This study sample was comprised of four groups: three groups of indigenes who were involved in varying degrees in organized sport programs from non-participation to the intense involvement of international competition, and one group of non-indigenes who were not involved in organized sports activities. The study attempted to use a matched design with respect to age and sex, but it was found that this would result in a loss of one third of the subjects available for the sample. Rather than lose such a large proportion of the limited sample, all subjects in each category were used (See Figure 1).

The dependent variable examined was the degree of participation in organized sport activities. The study used a series of measures in which the three indigenous groups were compared with each other and with a sample of non-participant non-indigenous students (this group was made up of non-indigenous school children from southern Canada who were living in the north at the time the study was conducted). This group was used to establish a standard on the factors measured which would be somewhat representative of southern Canadian attitudes, values, and culture in a northern setting.

Instruments

Basically two sets of instruments and measures were used in the study. One set focused on the perceived degree

FIGURE I

BASIC RESEARCH DESIGN

Age Range	Indigenous Non-Participants	Other Sport Participant	Test Participant	Non-Indigenous Non-Participant
10-11	F = 3	F = 3	F = 3	F = 3
	M = 4	M = 5	M = 4	M = 4
12-13	F = 10	F = 8	F = 9	F = 8
	M = 3	M = 7	M = 7	M = 4
14-15	F = 4	F = 2	F = 3	F = 3
	M = 4	M = 6	M = 6	M = 3
16-17	F = 2	F = 1	F = 1	F = 1
	M = 1	M = 1	M = 2	M = 4
18-20	F = 4	F = 1	F = 4	F = 2
	M = 0	M = 5	M = 4	M = 1
N	M = 12	M = 23	M = 23	M = 16
	F = 23	F = 15	F = 20	F = 17

Total Male Subjects N = 74
Total Female Subjects N = 75

and importance of achievement to the subjects while the other set attempted to evaluate their self-esteem and the importance of dominance and sociability in their personality. These particular personality traits were examined because of their apparent association with the phenomena of sport.

Measures of Achievement

Achievement Orientation

Achievement orientation was measured by the revised standardized inventory developed by Rosen (1956, pp. 203-11). This instrument differentiates the "activistic, individualistic, future oriented" (achievement) individual from the "passivistic, familistic, presented oriented" (non-achievement) individual. A high score indicated a high level of achievement orientation (See Appendix B).

Professionalization

Professionalization is a measure devised by Webb (1969, pp. 161-89) that differentiates individuals who are "professionally oriented" (individuals who value winning higher than skill which is valued higher than fairness) from those who are "play oriented" (who value fairness higher than skill which is valued higher than winning). A high score is indicative of a high degree of "professional orientation" while a low score is indicative of a "play oriented" individual

(See Appendix C, question 5).

Educational Achievement

An attempt was made to compare the levels of educational achievement of the experimental groups. It was found that the teachers in the schools were not using standardized tests in a uniform manner and many were not using them at all. This occurred because of the questionable value of the culturally biased standardized tests which were available. As a consequence each student was assigned a letter grade based on their teacher's rating of their academic performance for the 1971-1972 school year.

Educational Orientation

Each subject was classified according to the level of education to which they aspired. This was based on the answer to a question dealing with how far the subject wanted to go in school (See Appendix C, question 2a).

Occupational Aspiration

The occupation listed by the subject in response to a question asking their choice for a future occupation (See Appendix C, question 2b). The response was assigned a score using the Blishen Canadian Occupational Scale (Blishen, 1967, pp. 41-53).

Status Mobility

An attempted comparison of differences of aspired status mobility of the experimental groups was undertaken using the difference between the Blishen Canadian Occupational Scale scores of the subjects' aspired occupation and the present occupation of the head of the subjects' household. The direction and magnitude of the difference would appear to be somewhat indicative of the aspired upward or downward mobility of the subjects.

Vocational Orientation

A classification of the occupation chosen by a subject based on its orientation to: (1) post-secondary educational training, (2) traditional cultural activities or values, or (3) vocations typically available which reflect southern values.

Other Personality Measures

Self-Esteem

A revision for cross-cultural use of the standardized inventory developed by Rosenberg (1965, pp. 16-36) based on a series of "self" attitudes generally indicative of self-esteem. The higher the score obtained using this inventory the lower the self-esteem of the subject (See Appendix D).

Sociability and Dominance

Two factors from the standardized Cattell 16 Personality Factor inventory (Cattell, 1957.) sociability and dominance were selected (See Appendices E and F). These were chosen because of their apparent relationship to involvement and participation in sport. The sociability measure differentiates an "outgoing, warm hearted, easy going participating" (sociable) individual, from a "reserved, detached, critical, cool" (unsociable) individual. A high score is indicative of high sociability.

The dominance measure differentiates between an "assertive, independent, aggressive, stubborn" (dominant) individual and an "obedient, mild, accommodating, conforming" (non-dominant) individual with high scores corresponding to high dominance scores.

Analysis

A graphic display of the mean scores, which gives a visual representation of trends, was done for all inventories and measures used except for the data collected with respect to educational aspiration and vocational orientation. The data for these two measures was presented as percentages in the form of a table.

A t-test was used to test for the significance of differences between the means computed for the indigenous

participants and those of the indigenous non-participants for the measures of achievement orientation, professionalization, occupational aspiration, status mobility, self-esteem, sociability and dominance.

A statistical analysis of the scores obtained from the measures of achievement orientation, professionalization, occupational aspiration, status mobility, and self-esteem was undertaken to test the significance of differences among the four experimental groups on these measures. This was done by using an analysis of covariance which showed significant differences of the dependent variable of sports participation and controlled for the independent variable of age. This was followed by a pairwise comparison using a contrast coefficient matrix to isolate those groups which accounted for the significant differences.

The tables of data compiled on educational aspiration and vocational orientation were analysed using a chi-square technique to test for the presence of significant differences. An analysis of simple effects in which different combinations of the data were analysed, using chi-square test, was conducted to determine those categories between which significant differences existed.

CHAPTER IV

RESULTS AND DISCUSSION

A number of measures were selected in an attempt to evaluate the importance of achievement to the subjects in each of the experimental groups. This dimension was selected as a measure which might well reflect the influence of the "Gesellschaft" oriented culture of southern Canada on indigenous northern youth raised in a more "Gemeinschaft" oriented cultural background.[1] It was felt that involvement in organized sport programs reflecting the values of achievement and individualism as well as the importance of competition and success typical of dominant southern culture would result in a greater degree of assimilation of these value orientations among those northern youngsters participating in these programs.

The data, with males and females treated separately, is presented and discussed for each of the measures in turn using tables to show the mean score for each age group of the four groups being analysed. A graphic presentation was done for most measures and the discussion focused on apparent trends shown by the graphs. For those measures which were analysed statistically the statistical significance of the trends is given. For all tests of significance probability scores of .05 or less were considered significant.[2]

Measures of Achievement

Achievement Orientation

The results for achievement orientation are presented in Table I and the graphs are shown in Figure 2. It is generally accepted the higher the score the higher the level of achievement orientation. For the most part the indigenous groups scored lower than the non-indigenous sample. To some extent this difference may reflect the cultural bias of the instrument, the Rosen questionnaire which emphasized affectively neutral rather affective orientations to decision making. Thus, for indigenous respondents those items which required the rejection of parental and family expectations in favor of personal achievement were culturally unacceptable and therefore resulted in the difference between the cultural groups. The trends of the achievement orientation scores graphed against age tended to be positive for both males and females.

Among the male groups the organized sport participants scored highest with a mean value of 7.17 which was very similar to the mean value of 7.06 for the non-indigenous non-participants. TEST participants had a mean value of 5.95 while the indigenous non-participants had the lowest mean value with 5.08. This data was analysed statistically using an analysis of covariance which indicated that significant differences existed ($p = 0.009$). By applying an orthogonal range test a significant difference was found between the mean values

obtained by organized sport participants and TEST participants ($p = 0.039$). The difference between the organized sport participants and the indigneous non-participants was very nearly significant ($p = 0.0509$). A further statistical analysis testing the difference between the mean scores of all indigenes who participated in sport[3] and the mean score of indigenous non-participants (see Table II) was found to be significant ($p = 0.013$).

The finding of a significant difference between the achievement orientation of indigenous sport participants in comparison with the indigenous non-participants provides some support for the hypothesis that participation in a sport-involvement environment results in acculturative processes characterized by a greater assimilation of southern values stressing achievement. The fact that a significant difference was found between the two groups of male indigenes participating in sport, with the organized sport participants scoring higher than TEST participants, supports the hypothesis that the nature of the activity affects the type of acculturation process which occurs. These results suggest that TEST participants tend to be somewhat more familistic and traditional-culture oriented than indigenous other sport participants.

Statistically there were no differences between female groups although TEST participants tended to score slightly higher than organized sport participants while indigenous non-participants tended to score higher than TEST participants.

The differences between the male and female data may be an indication of the different social situations and expectations evolving for each sex with respect to participation in sport.

The data on achievement orientation highlights three important observations with respect to the influence of sport participation on the processes of acculturation. The fact that indigenous male sport participants have a significantly higher level of achievement orientation than the indigenous male non-participants suggests that participation in a sport environment reinforces a greater degree of assimilation of southern values with respect to competition and achievement. The difference in the data between the two indigenous male participant groups suggests that if the activities chosen for the sport environment include elements which allow for the expression of values related to the traditional culture then the acculturative processes are characterized by a greater degree of cultural fusion.

The most striking and surprising finding was the fact that the female data did not show similar changes for female sport participants. In terms of acculturative process the data suggests that the expression of achievement is not influenced by participation in sport oriented environments. This may indicate that sport participation is viewed as less acceptable for females than males.

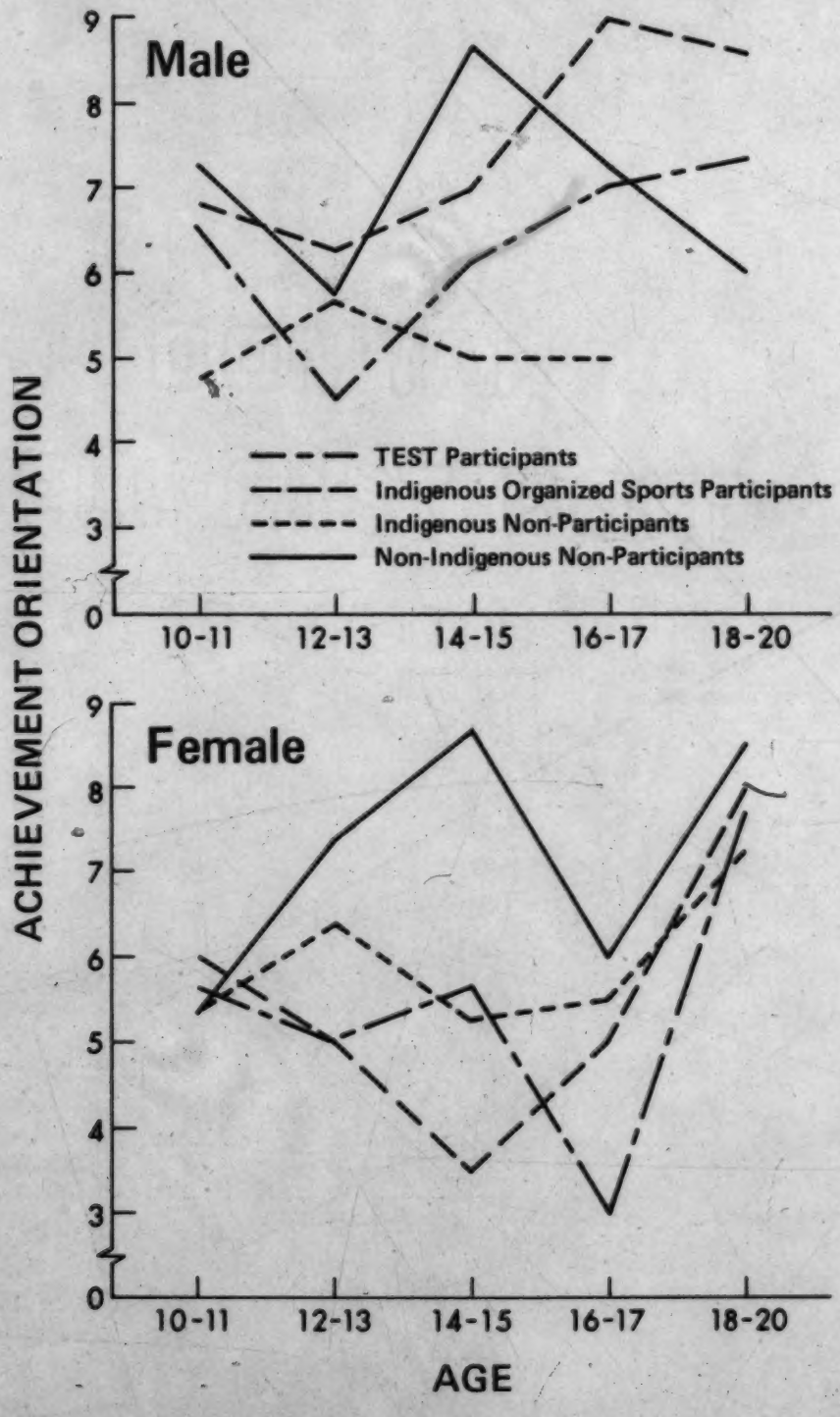

FIGURE 2. Achievement Orientation of Experimental Groups as a Function of Age

TABLE I

ACHIEVEMENT ORIENTATION OF EXPERIMENTAL GROUPS

Age Range	Indigenous Non-Participants	Organized Sport Participants	Test Participants	Non-Indigenous Non-Participants
		MALES		
10-11	4.75	6.80	6.50	7.25
12-13	5.67	6.29	4.57	5.75
14-15	5.00	7.00	6.17	8.67
16-17	5.00	9.00	7.00	7.25
18-20	-	8.60	7.33	6.00
Group Means	5.08	7.17	5.95	7.06
		FEMALES		
10-11	5.33	6.00	5.67	5.33
12-13	6.40	5.00	5.00	7.38
14-15	5.25	3.50	5.67	8.67
16-17	5.50	5.00	3.00	6.00
18-20	7.25	8.00	7.75	8.50
Group Means	6.13	5.20	5.65	7.29

TABLE II

TESTS OF DIFFERENCES BETWEEN MEANS OF INDIGENOUS PARTICIPANTS AND INDIGENOUS NON-PARTICIPANTS

Measure	Mean of Indigenous Participants	Mean of Indigenous Non-Participants	N	t	Probability
Achievement Orientation					
Male	6.59	5.08	58	2.47	0.013*
Female	5.46	6.13	58	1.27	0.206
Professionalization					
Male	2.85	2.16	59	1.60	0.110
Female	2.39	2.65	56	0.67	0.505
Vocational Aspiration					
Male	54.37	39.91	34	1.74	0.094
Female	47.13	47.63	33	0.15	0.880
Aspired Status Mobility					
Male	21.86	10.95	30	1.16	0.248
Female	8.66	10.45	29	0.39	0.698
Self-Esteem					
Male	2.78	3.00	59	0.59	0.557
Female	2.83	3.26	58	1.51	0.133
Sociability					
Male	5.92	5.83	58	0.14	0.888
Female	6.67	6.74	56	0.13	0.896
Dominance					
Male	4.72	4.89	59	0.59	0.557
Female	3.44	3.64	57	0.70	0.485

*Significant differences (p = .05 or less)

Professionalization

The results of this measure are found in Table III and Figure 3. The higher professionalization scores indicate an increase in the importance of winning and competition at the expense of participation and fair play. Although there were no statistically significant differences the older TEST participants, both male and female showed a greater increase in professionalization scores when compared to younger TEST participants than any of the other experimental groups. This increase indicates an increasing commitment to excellence and success.

There is a marked correspondence between TEST male scores and male scores obtained in the Michigan State study (Webb, 1969, p. 169) for which Webb devised this instrument. The male organized sport participants maintain a level of professional orientation similar to the level attained by the TEST participants and consistantly higher than non-participants. There is no trend toward an increase in professionalization among either organized sport participants or non-participants. The increasing professional orientation of TEST participants possibly reflects the emphasis of this program on success and excellence. Unfortunately the data does not indicate a clear shift towards professionalization which is statistically significant.

The female TEST scores which show an increase in professional orientation over time, are similar to those attained

by TEST males. The increase in scores by female other sport participants was less marked. Both these results might be explained by the intensity of demands of the programs on success and excellence.

Although the indigenous male non-participants tended to be more play oriented with a slower rate of professionalization than the indigenous participant groups, which given their traditional cultural background would be expected, the lack of significant differences between groups means that the apparent differences do not necessarily represent differences supporting the hypothesis of increased assimilation. The female non-participants show a trend of an increasing level of professional orientation similar to the other female groups. This may be indicative of congruence of different cultural roles available to indigenous females in the changing north which restricts the direction of acculturative change.

Educational Achievement

This data, presented in Table IV and Figure 4, indicates that some differences between male groups but not between the female groups were present. No statistical analysis was done because of the nature of the scores, which were given as letter grades, and because of possible lack of reliability as these grades were not based on standardized tests but assigned to students by various teachers.

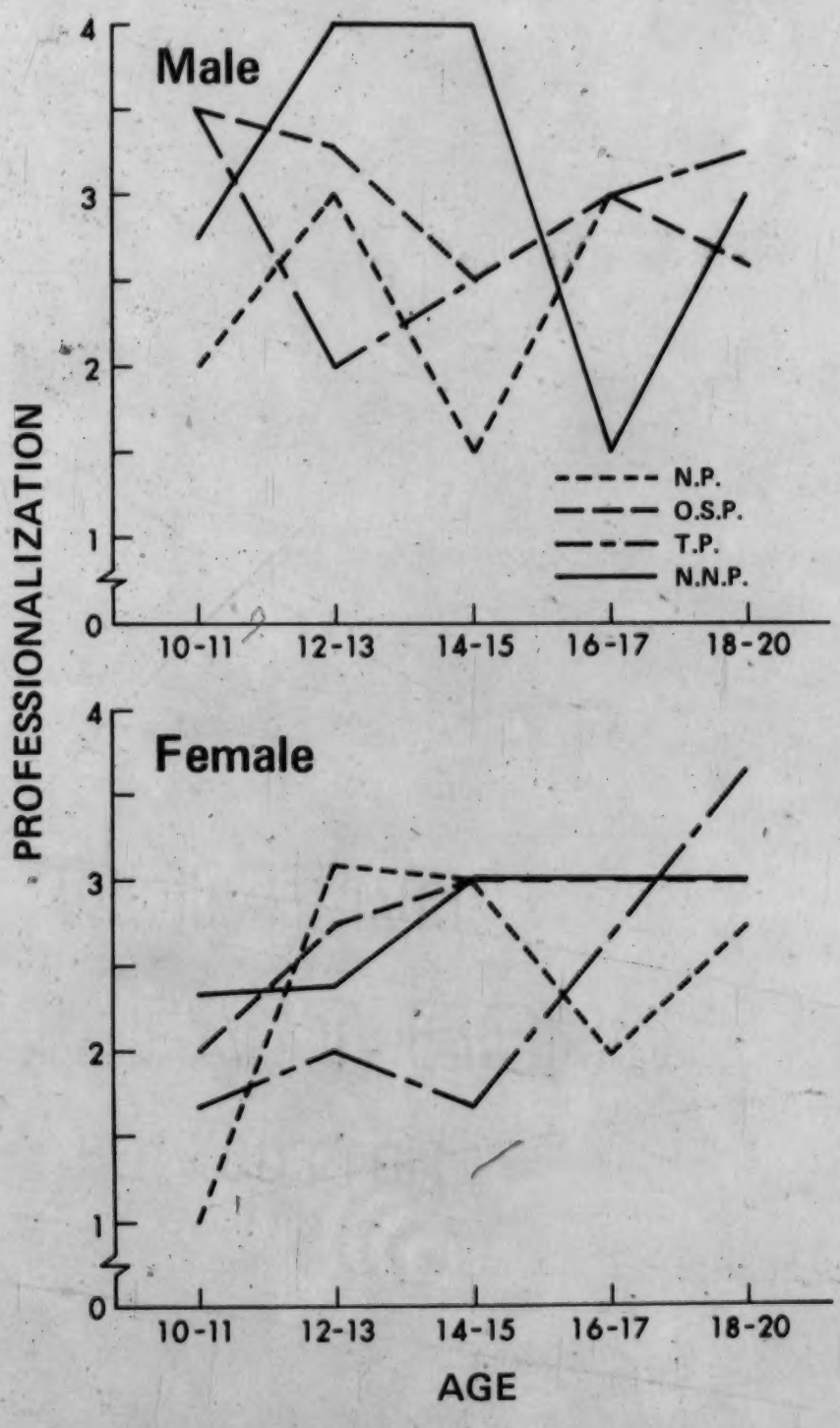

FIGURE 3. Professionalization of Experimental Groups as a Function of Age

TABLE III

PROFESSIONALIZATION OF EXPERIMENTAL GROUPS

Age Range	Indigenous Non-Participants	Organized Sport Participants	Test Participants	Non-Indigenous Non-Participants
		MALE		
10-11	2.00	3.50	3.50	2.75
12-13	3.00	3.29	2.00	4.00
14-15	1.50	2.50	2.50	4.00
16-17	3.00	3.00	3.00	1.50
18-20	-	2.60	3.25	3.00
Group Means	2.25	3.00	2.70	3.00
		FEMALE		
10-11	1.00	2.00	1.67	2.33
12-13	3.10	2.75	2.00	2.38
14-15	3.00	3.00	1.67	3.00
16-17	2.00	3.00	-	3.00
18-20	2.75	3.00	3.66	3.00
Group Means	2.65	2.67	2.16	2.59

Among the male groups the non-indigenous participants and the TEST participants have means which approximate the letter grade B - while the indigenous non-participants and the organized sport participants have means approximating the letter grade C. There was little difference among the female groups with all groups averaging a letter grade C plus.

Educational Orientation

The data for educational aspiration (See Table V) resulted in a probability of significant differences between groups of $P = 0.075$ for females and $p = 0.161$ for males; neither of these indicate a statistically significant difference between groups.

Among the males, the organized sport participants aspired to a slightly higher level of education than other indigenous groups, while the non-indigenous groups aspired to a higher level of education than all the others. In general, there was a high commitment to finish High School or to go to University for all groups.

For the females, TEST females aspired to a higher level of education than the other two indigneous groups; although this was much lower than the level of aspiration of the non-indigenous females.

The orientation of the indigneous students toward education beyond grade twelve (almost 50%) is somewhat unrealistic given the numbers of students who actually go and the

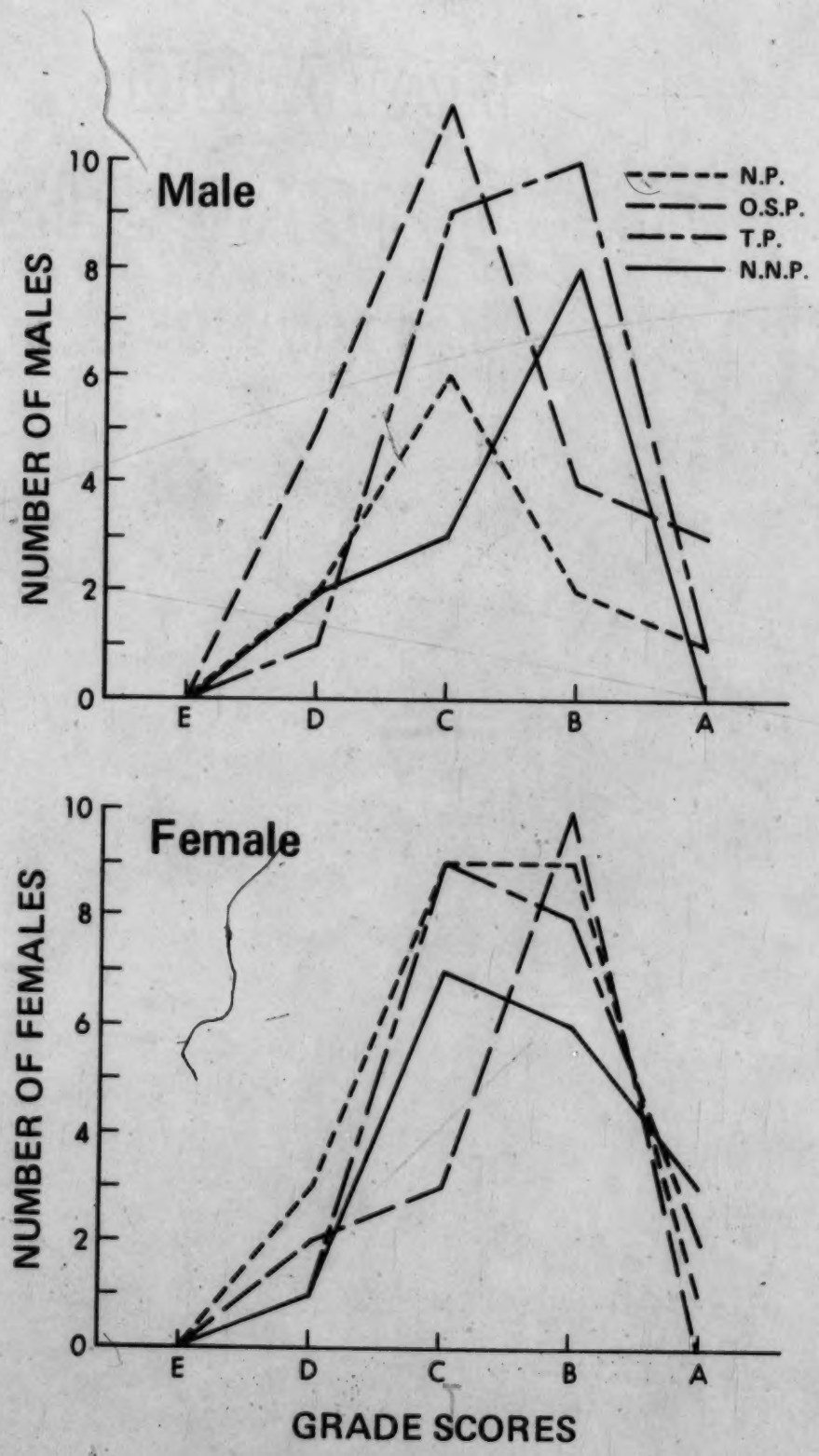

FIGURE 4. Educational Achievement

TABLE IV

EDUCATIONAL ACHIEVEMENT OF EXPERIMENTAL GROUPS

Age Range	Indigenous Non-Participants					Organized Sport Participants					Test Participants					Non-Indigenous Non-Participants				
	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
MALE																				
10-11	1	1	2	-	-	-	1	4	-	-	-	2	2	-	-	-	4	-	-	-
12-13	-	-	3	-	-	1	1	1	4	-	1	4	1	1	-	-	3	-	1	-
14-15	-	-	1	2	-	1	1	3	1	-	-	3	2	-	-	-	-	-	-	-
16-17	-	1	-	-	-	-	-	1	-	-	-	-	2	-	-	-	1	2	1	-
18-20	-	-	-	-	-	1	1	2	-	-	-	1	2	-	-	-	-	1	-	-
Group Totals	1	2	6	2	-	3	4	11	5	-	7	10	9	1	-	-	8	3	2	-

TABLE IV (Continued)

Age Range	Indigenous Non-Participants					Organized Sport Participants					Test Participants					Non-Indigenous Non-Participants				
	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
FEMALE																				
10-11	-	2	1	-	-	-	2	1	-	-	-	2	1	-	-	1	2	-	-	-
12-13	1	6	2	1	-	-	6	1	1	-	1	5	2	1	-	-	3	4	1	-
14-15	-	-	1	2	-	-	2	-	-	-	1	-	2	-	-	1	1	1	-	-
16-17	-	-	2	-	-	-	-	1	-	-	-	-	1	-	-	-	-	1	-	-
18-20	-	1	3	-	-	-	-	1	1	-	-	1	3	-	-	1	-	1	-	-
Group Totals	1	9	9	3	-	-	10	3	2	-	2	8	9	1	-	3	6	7	1	-

opportunities which presently exist for individuals with such training in the north. This situation reflects a high degree of assimilation of southern orientation towards education which is disturbing in light of the realities of the northern situation. The only group to reflect a more healthy attitude towards an aspired level of education was the male TEST participants of whom only 21.7% were oriented beyond grade twelve.

Occupational Aspiration

The occupational aspiration data is found in Table VI and represented graphically in Figure 5. Among the males there were no differences that were statistically significant. The indigenous non-participants scored lowest on this measure (mean value of 39.91), while indigenous participant groups scores were comparable to each other (mean values of 54.0 and 54.67) and consistently higher than those of indigenous non-participants. The non-indigenous male sample appeared atypical in age range above thirteen years in that their choices did not reflect a commitment to values which could be considered representative of southern males. The older non-indigenous males in the sample appeared to have developed an anti-establishment viewpoint which rejected the values and behavior patterns expected by southern society. It is possible that this reflects to some extent a degree of assimilation of indigenous values to which they had been exposed. It may also

TABLE V

EDUCATIONAL ORIENTATION

	Indigenous Non-Participants	Organized Sport Participants	Test Participants	Non-Indigenous Non-Participants
		MALE		
No Answer	0 (0%)	1 (4.2%)	0 (0%)	0 (0%)
Finish Less Than Grade XII	3 (25%)	3 (12.5%)	12 (52.2%)	0)0%)
Finish Grade XII	3 (25%)	7 (29.2%)	12 (52.5%)	9 (50%)
Post-Secondary Education	6 (50%)	13 (54.2%)	5 (21.7%)	8 (50%)
Total Who Aspire to Finish Grade XII, or Post-Secondary Education	9 (75%)	20 (83.4%)	17 (73.9%)	16 (100%)

TABLE V (Continued)

	Indigenous Non-Participants	Organized Sport Participants	Test Participants	Non-Indigenous Non-Participants
		FEMALE		
No Answer	1 (4.3%)	0 (0%)	1 (5%)	0 (0%)
Finish Less Than Grade XII	4 (17.4%)	3 (20%)	0 (0%)	1 (5.9%)
Finish Grade XII	6 (26.1%)	6 (40%)	9 (45%)	1 (5.9%)
Post-Secondary Education	6 (26.1%)	6 (40%)	10 (50%)	15 (88.2%)
Total Who Aspire to Finish Grade XII, or Post-Secondary Education	18 (78.3%)	12 (80%)	19 (95%)	16 (94.1%)

be due to the fact that these young men may resent the establishment view of their parents because they have not been raised in an environment reinforcing congruent value orientations. This would be particularly true for those who have spent a greater proportion of their lives in these situations. Thus, this group was not as representative of the southern culture as they might have been.

For the females the analysis of covariance revealed highly significant probability differences between the non-indigneous group and all three indigenous groups with measures of $p = 0.0011$, $p = 0.0055$, and $p = 0.002$ between the non-indigenous females and the non-participants, other sport participants, and TEST participants respectively. No differences were clearly distinguishable between the three indigenous groups.

The fact that the females did not show this atypical reaction to the same degree might have been due to a greater degree of congruence between female roles in the two cultures. This would mean that the value conflicts which appeared in the male sample would not have been as great for the females.

Aspired Mobility

The data with respect to status mobility is shown in Table VII and on the graph in Figure 6. Statistically, there were no significant differences between groups for either the males or the females. There were no clearly

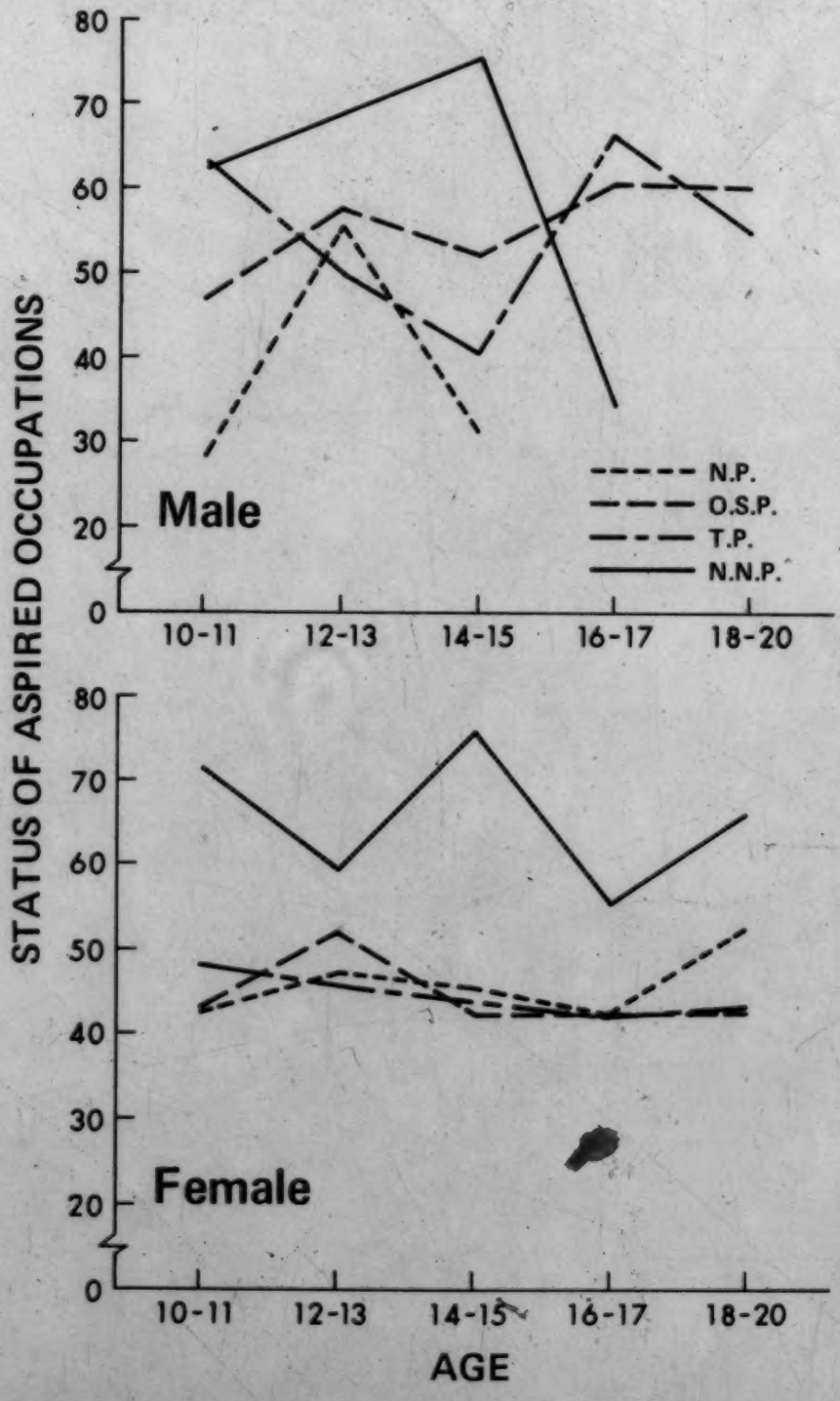

FIGURE 5. Status of Aspired Occupations of Experimental Groups as a Function of Age

TABLE VI

STATUS OF ASPIRED OCCUPATIONS OF EXPERIMENTAL GROUPS

Age Range	Indigenous Non-Participants	Organized Sport Participants	Test Participants	Non-Indigenous Non-Participants
		MALE		
10-11	28.33	47.02	63.33	62.53
12-13	55.78	57.67	50.22	-
14-15	31.30	52.25	40.75	75.41
16-17	-	60.93	66.04	34.77
18-20	-	60.28	55.68	-
Group Mean	39.91	54.00	54.67	59.55
		FEMALE		
10-11	42.57	43.21	48.30	71.54
12-13	47.27	52.03	45.98	59.52
14-15	45.67	42.57	-	75.57
16-17	42.98	-	42.57	55.62
18-20	52.06	42.98	43.52	66.22
Group Mean	47.63	48.42	45.52	65.50

distinguishable differences among the indigenous male groups, and as in the occupational aspiration scores the non-indigenous males tended to be atypical for the age range above thirteen years.

For the females, the non-indigenous group scored consistently higher than any other group, while the TEST female participants generally scored lower than the other two indigenous groups who show no clear differences between each other. In general, the results of this measure are masked by the extreme differences in the distributions of the household head's occupation for the various groups.

Vocational Orientation

The subjects' orientation toward future vocations are shown in Table VIII which clearly indicates a high level of male indecision relative to future careers. The undecided segment of TEST participants is the smallest with only thirty percent undecided, whereas organized sport participants are forty-six percent undecided, non-participants are sixty-nine percent undecided. The other major difference is that fifty-two percent of the TEST participant males chose vocations reflecting an orientation to traditional cultural activities or values while only eight percent of the organized sport participants and eight percent of non-participants made such choices.

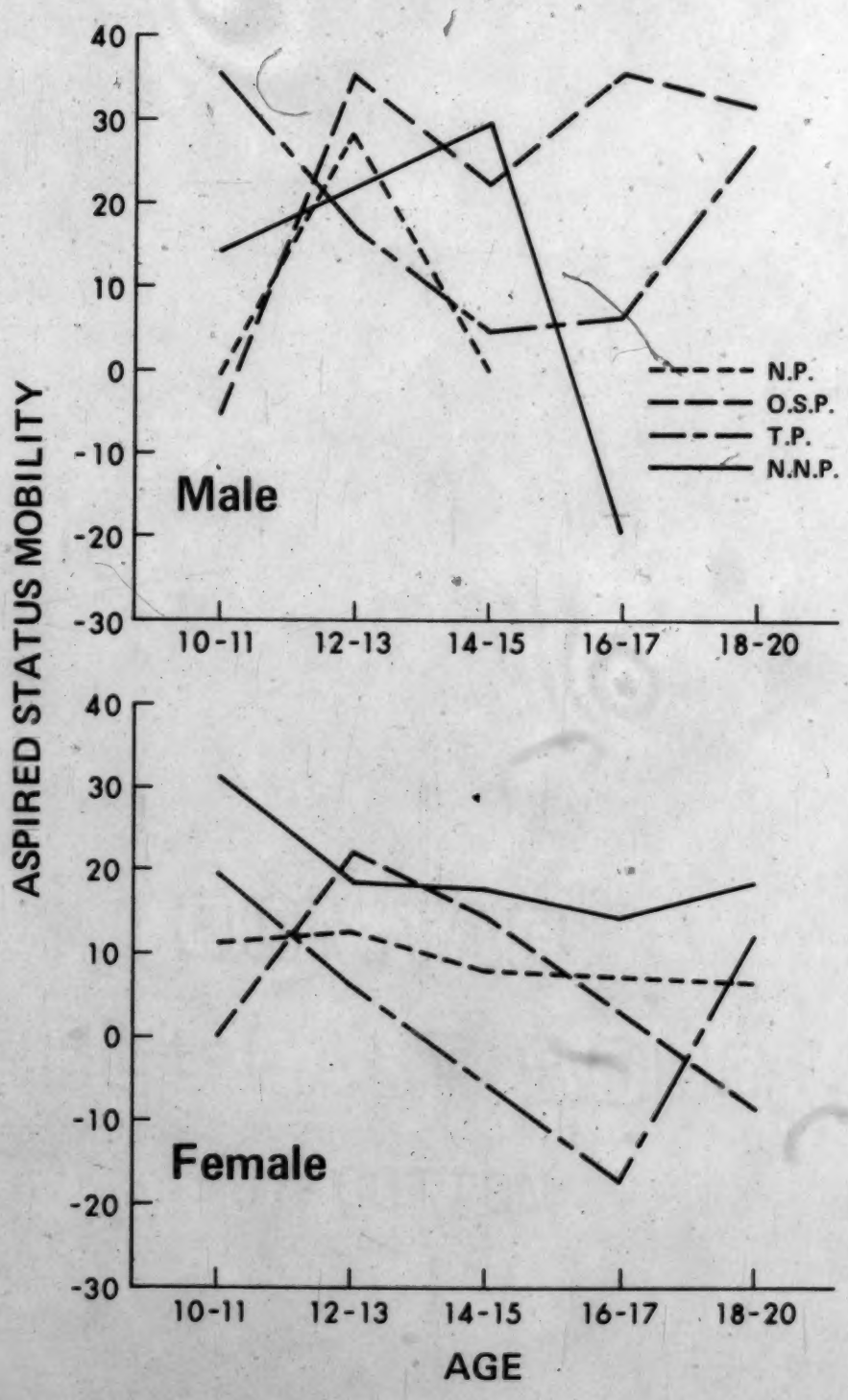

FIGURE 6. Aspired Status Mobility of Experimental Groups as a Function of Age.

TABLE VII

STATUS MOBILITY OF EXPERIMENTAL GROUPS

Age Range	Indigenous Non-Participants	Organized Sport Participants	Test Participants	Non-Indigenous Non-Participants
		MALE		
10-11	-.71	5.36	35.59	14.19
12-13	28.09	35.27	17.08	-
14-15	0.01	22.46	4.97	29.93
16-17	-	35.57	6.44	-19.77
18-20	-	31.60	27.07	-
Group Mean	10.95	21.66	22.02	10.54
		FEMALE		
10-11	11.27	0.36	19.81	31.11
12-13	12.62	22.26	6.23	18.50
14-15	7.96	14.35	-	17.76
16-17	7.18	-	-17.03	14.19
18-20	6.52	-8.53	12.22	18.47
Group Mean	9.61	10.47	6.56	21.15

The chi square analysis indicates that significant differences existed in the comparisons of the various groups ($p = 0.00095$). The analysis of simple effects reveals that most of the significant effects occurred between the indigenous category as a group and the non-indigenous group thereby reflecting existing cultural differences.[4] However, there was a significant difference between TEST program participants and other indigenes in that the former showed a significantly ($p = 0.00004$) greater orientation to vocations reflecting traditional-cultural activities and values.

Among the females the non-participants were thirty-five percent undecided, organized sport participants were thirty-three percent undecided, TEST females were sixty percent undecided while non-indigenous females were only twenty-four percent undecided. In twenty percent of their choices TEST females expressed an orientation towards occupations which reflect a bias towards traditional-cultural activities or values. This was the only female group to express such a bias. There were differences in the orientation to occupations which were oriented to post-secondary occupations: where only fifteen percent of the TEST females chose occupations in this category, thirty-five percent of the indigenous non-participants, fifty-three percent of organized sport participants and seventy-one percent of non-indigenous females made choices in this category.

Statistically, these differences were significant ($p = 0.00086$) and as in the case of the males much of the

significant difference was due to the cultural differences between the indigenes and non-indigenes.[5] An analysis of simple effects indicated significant differences ($p = 0.0102$) between TEST participants females and other indigeneous females with respect to the distribution of undecided compared to southern oriented and post-secondary oriented choices. TEST program females were largely undecided (60%) while other indigenes were principally oriented to southern and post-secondary oriented choices (66%). The selection of traditional-culturally oriented vocations among TEST participant females was also significantly greater ($p = 0.0013$) than such choices among the other indigenous groups.

The differences between the TEST participants and other indigenes for both the males and females in choosing occupations reflecting traditional-cultural activities and values provide support for the hypothesis that participation in activities reflecting aspects of traditional culture results in acculturative processes emphasizing cultural fusion. The fact that the TEST females were largely undecided while the other indigenous groups choices were oriented to vocations reflecting southern values could be indicative of cultural conflict taking place among the TEST females with respect to choice of a vocational role. The lack of roles, presently acceptable, which allow the female to identify with elements of the traditional culture is a coercive influence which might set up conditions for cultural conflict. For the most part

TABLE VIII

VOCATIONAL ORIENTATION OF EXPERIMENTAL GROUPS

Occupational Orientation	Indigenous Non-Participants	Organized Sport Participants	Test Participants	Non-Indigenous Non-Participants
		MALE		
Oriented to Post-Secondary Educational Training	1 (8.3%)	4 (16.7%)	2 (8.7%)	4 (25%)
Oriented to Vocations Typically Available reflecting Southern Values	4 (33.3%)	7 (29.2%)	2 (8.7%)	7 (6.2%)
Oriented to Traditional Cultural Activities or Values	1 (8.3%)	2 (8.3%)	12 (52.2%)	0 (0%)
Undecided	6 (50%)	11 (45.8%)	7 (30.4%)	11 (68.8%)

TABLE VIII (Continued)

Occupational Orientation	Indigenous Non-Participants	Organized Sport Participants	Test Participants	Non-Indigenous Non-Participants
		FEMALE		
Oriented to Post-Secondary Educational Training	8 (34.8%)	8 (53.3%)	3 (15%)	12 (70.6%)
Oriented to Vocations Typically Available reflecting Southern Values	7 (30.4%)	2 (13.3%)	1 (5%)	1 (5.9%)
Oriented to Traditional Cultural Activities or Values	0 (0%)	0 (0%)	4 (20%)	0 (0%)
Undecided	8 (34.8%)	5 (33.3%)	12 (60%)	4 (23.5%)

the indigenous females appear to have assimilated southern ways to a greater extent than the males. This has resulted in conflict between the sexes, particularly in defining what are acceptable roles for females and what constitutes success for a male. The TEST females appear to have internalized this conflict, possibly because of a greater awareness and appreciation of traditional culture and values. Their indecision and orientation to vocational choices reflecting a traditional culture seem to support this view.

Measures of Other Personality Characteristics

Three personality measures were selected in an attempt to ascertain the impact of this acculturative situation on the personality structure of the subjects. The measure of self-esteem was an attempt to ascertain the extent of positive and negative reactions of the subjects in terms of their view of "self". Jetté and others in their investigation of personality characteristics of TEST skiers using the Cattell 16 Personality Factor Inventory, found that the participation in the skiing program was associated with changes in sociability and dominance measures.[6] These two factors were selected because of this apparent relationship to participation in sport programs.

Self-Esteem

The self-esteem data is found in Table VIII and graphed in Figure 7. It should be noted that a low score is indicative of a high level of self-esteem. In both the male and female cases the TEST program participants have a high self-esteem score approximating that of the respective sex in the non-indigenous sample. The other indigene's scores are lower on this measure of self-esteem. Self-esteem in the male group shows a tendency to increase with age although the other indigenous groups generally score lower than the male TEST participants. No clear trends can be distinguished among the female groups.

The statistical analyses show that a significant difference ($p = 0.0406$) existed between organized sport participants and the non-indigenous non-participants. There were no statistically significant differences among the females.

The difference in self-esteem between male sport participants and non-indigenous participants is possibly a result of the opportunities which the respective group perceives for a fulfilling and satisfying life. Thus, one would expect a lower score from the indigenous subjects given the disadvantages which they face at moving into the mainstream of Canadian life. This dilemma becomes more acute as the indigenes assimilate a greater degree of the southern value of achievement. The indigenous organized sport participants had shown the

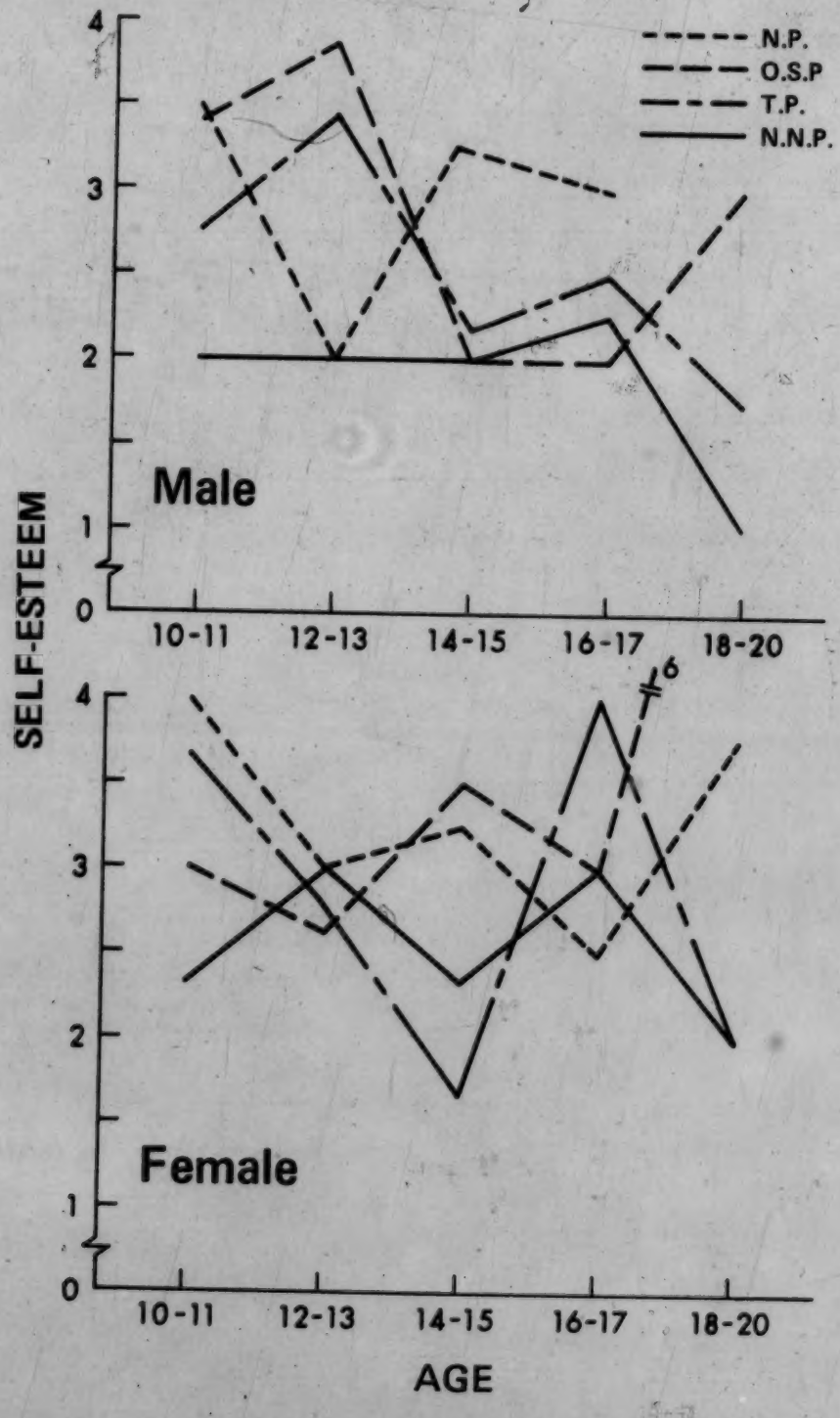

FIGURE 7. Self-Esteem of Experimental Groups as a Function of Age

TABLE IX

SELF-ESTEEM OF EXPERIMENTAL GROUPS

Age Range	Indigenous Non-Participants	Organized Sport Participants	Test Participants	Non-Indigenous Non-Participants
		MALE		
10-11	3.5	3.4	2.75	2
12-13	2	3.86	3.43	2
14-15	3.25	2	2.17	2
16-17	3	2	2.5	2.25
18-20	-	3	1.75	1
Group Mean	3	3.04	2.61	2.0
		FEMALE		
10-11	4	3	3.67	2.33
12-13	3	2.62	2.78	3
14-15	3.25	3.5	1.67	2.33
16-17	2.5	3	4	3
18-20	3.75	6	2	2
Group Mean	3.26	3.07	2.65	2.65

greatest degree of assimilation of achievement in terms of the measure of achievement orientation which resulted in this lower self-esteem in view of the opportunities which presently exist in the north.

Sociability

The sociability results are presented in Table IX and graphed in Figure 8. They show an expected cultural difference with the cooperative, trusting, sharing indigenes scoring higher than their more individualistic peers. Given the importance of sharing and cooperation in the traditional cultures of northern indigenous peoples the cultural difference in this measure of sociability would be expected. The lack of significant differences show that acculturative changes may have occurred in terms of sociability. In both the male and female groups all categories show a clear trend of decreasing sociability as they increase in age. This may be a reflection of an increasing socialization and acculturation to the more competitive, individualistic, adult world.

Dominance

The dominance data (See Table X and Figure 9) clearly show cultural differences between the indigenous groups and the non-indigenous group. These differences express themselves clearly among the older respondents. As might be expected, the indigenous culture with its values of sharing

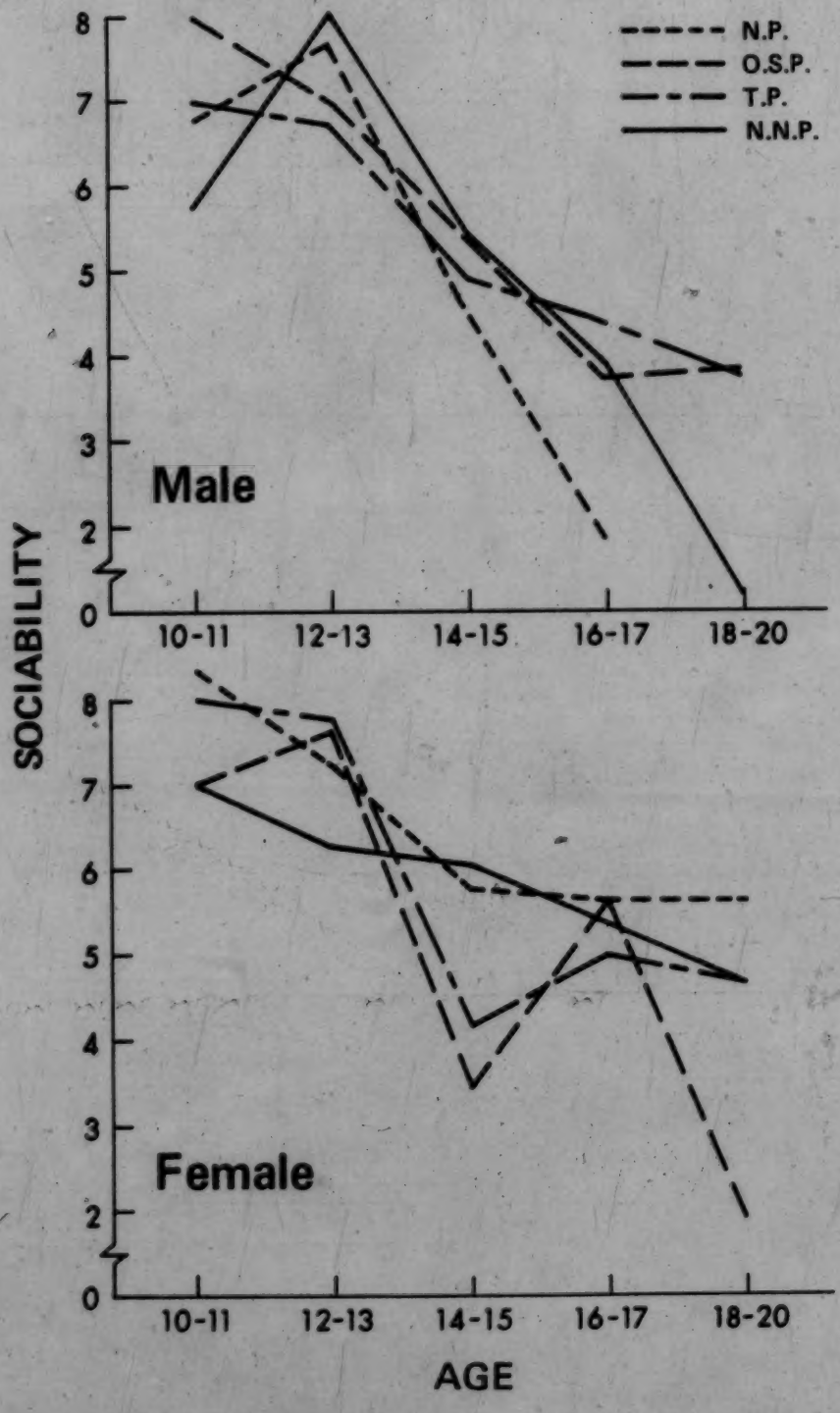

FIGURE 8. Sociability of Experimental Groups as a Function of Age

TABLE X

SOCIABILITY OF EXPERIMENTAL GROUPS

Age Range	Indigenous Non-Participants	Organized Sport Participants	Test Participants	Non-Indigenous Non-Participants
		MALE		
10-11	6.75	8	7	5.75
12-13	7.67	7	6.71	8
14-15	4.53	5.31	4.90	5.41
16-17	1.88	3.75	4.38	3.91
18-20	-	3.88	3.75	1.25
Group Mean	5.83	6	5.57	5.51
		FEMALE		
10-11	8.33	7	8	7
12-13	7.2	7.62	7.77	6.25
14-15	5.78	3.44	4.17	6.04
16-17	5.62	5.62	5	-
18-20	5.62	1.88	4.69	4.69
Group Mean	6.74	6.42	6.51	6.16

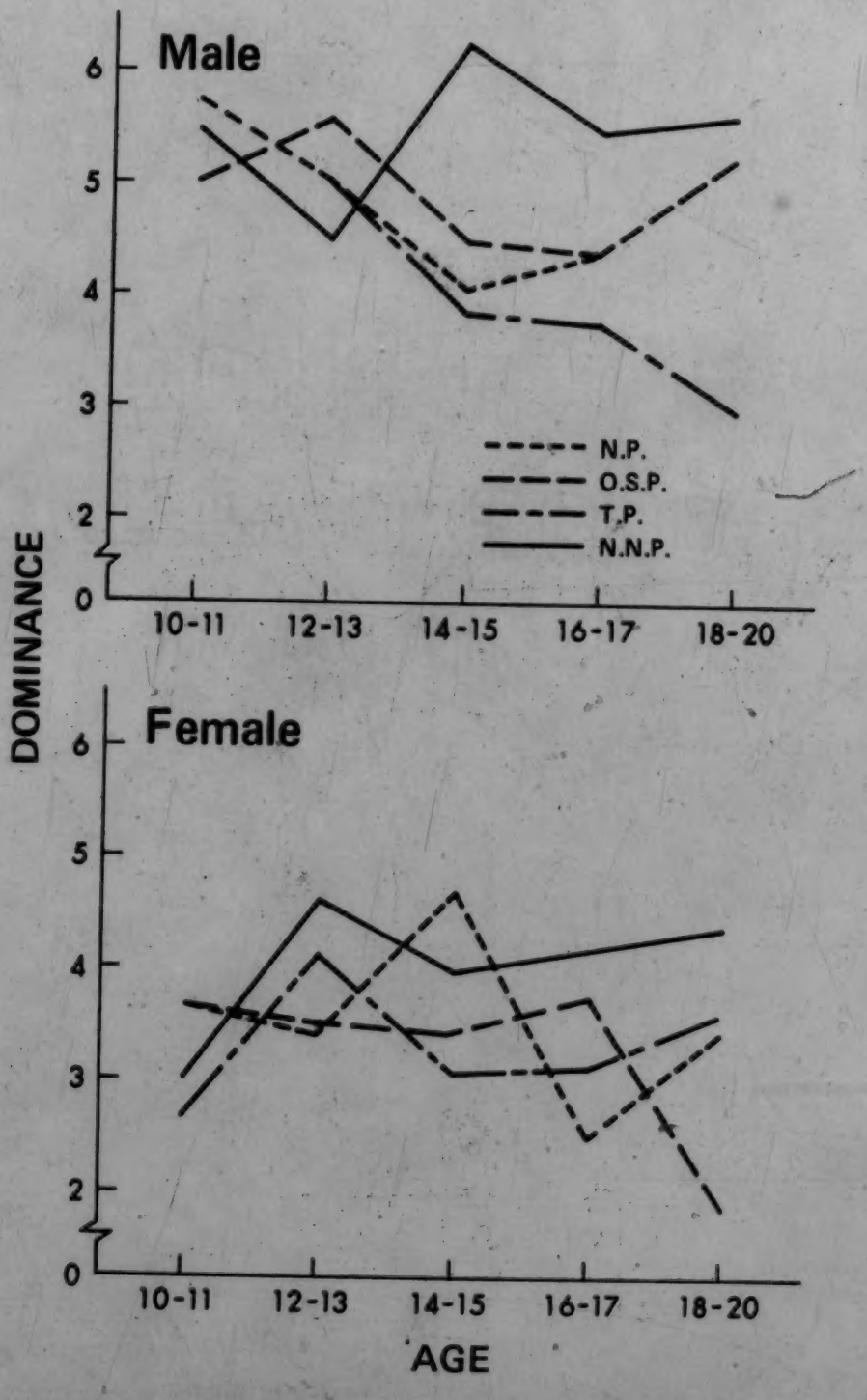

FIGURE 9. Dominance of Experimental Groups as a Function of Age

TABLE XI

DOMINANCE OF EXPERIMENTAL GROUPS

Age Range	Indigenous Non-Participants	Organized Sport Participants	Test Participants	Non-Indigenous Non-Participants
		MALE		
10-11	5.75	5	5.75	5.5
12-13	5	5.57	5	4.5
14-15	4.06	4.48	3.85	6.25
16-17	4.38	4.38	3.75	5.47
18-20	-	5.25	2.97	5.62
Group Mean	4.88	5.06	4.37	5.39
		FEMALE		
10-11	3.67	3.67	2.67	3
12-13	3.4	3.5	4.11	4.62
14-15	4.69	3.44	3.08	3.96
16-17	2.5	3.75	3.12	-
18-20	3.44	1.88	3.59	4.38
Group Mean	3.44	3.43	3.64	4.16

and humility is reflected in the consistently lower dominance scores of the indigenes. No clearly distinguishable trends are evident in comparisons of the indigenous groups.

FOOTNOTES--CHAPTER IV

[1]See McKinney (1966, pp. 100-136) who outlines these polar orientations in the development of a typology characterizing the structure of social roles. The characterization of the social action of a particular culture can be rated along a continuum from a "Gemeinschaft" orientation to a "Gesellschaft" orientation. The six dimensions examined are:

(1) Affectivity - Affective neutrality
(2) Particularism - Universalism
(3) Ascription - Achievement
(4) Diffuseness - Specificity
(5) Traditional - Rational
(6) Familistic - Contractual

[2]This indicates that chances of finding a significant difference between groups when none exists is five chances in 100 (Edwards, 1969, p. 134). When using instruments of this nature for social research a probability level of $p = 0.10$ or less is often used. Given the cross-cultural nature of the study and being unable to attain a matched sample the more conservative measure of significance ($p = .05$) was used.

[3]Both organized sport participants and TEST participants.

[4]This is indicated when indigenes as a group are compared to the non-indigenes on occupations oriented to traditional-cultural activities or values as opposed to all other choices. The chi-square test found significant differences ($p = 0.024$) between the cultural groups. The difference between the cultural groups is approaching significance when comparing choices of occupations oriented to post-secondary education to those oriented to southern values ($p = .077$).

[5]Significant differences (using chi-square analysis) exist between the cultural groups when comparing choices oriented to post-secondary education and those occupations reflecting southern values ($p = 0.044$). The difference between the cultural groups when comparing the undecided to those who chose post-secondary oriented or southern oriented vocations is very nearly significant ($p = 0.09$).

[6]Personal communication with Dr. M. Jetté, University of Ottawa.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This study examined participation of northern youth in organized sport programs in an attempt to ascertain the impact of this participation on the strategies of adaptation developed in the acculturative situation of the conjunction of southern and indigenous cultures in the Mackenzie Delta. The indigenous subjects were classified according to the extent to which they were involved in sport. They were classified into three groups: non-participants, organized sport participants and TEST participants. This varied the participation in organized sport programs with different orientations to producing acculturative change from the non-involvement of the non-participants to the intense orientation to change of the TEST program. A sample of non-indigenous non-participant youth were examined in an attempt to establish scores for a control group. A measure against which scores obtained using the instruments of the study could be compared to a "standard" reflecting a southern orientation.

Basically two comparisons were made: the first to establish whether differences existed between indigenous participants and indigenous non-participants, while the second to examine the differences between the four groups. These comparisons were made on a number of measures of

achievement, the importance of achievement to the subject and selected personality characteristics which were felt to be related to participation in sport.

The first of the three hypotheses examined attempted to establish if participation in organized sport programs resulted in strategies of adaptation characterized by the assimilation of southern values stressing achievement and competition. The significant difference found between indigenous male participants and non-participants in the measure of achievement orientation and the trend of a higher occupational aspiration of indigenous male participants when compared to non-participants provided evidence supporting the first hypothesis in terms of the male participation in organized sport programs. None of the data provided any support for the acceptance of this hypothesis about female participation in organized sport programs.

The second hypothesis postulated that an increase in the intensity of orientation to acculturation of an organized sport program would result in a corresponding increase in the degree of assimilation which occurred. The research of this thesis provided no evidence to support this hypothesis: frequently male and female organized sport participants and non-participants scored higher, although not statistically significantly, than TEST participants on measures which reflected an acculturation to southern values. None of the findings corresponded to the ranking which would support this

hypothesis, whereby TEST participants score higher than organized sport participants who score higher than non-participants.

The nature of the TEST program, which emphasized elements which were congruent with the traditional culture, introduced a confounding factor which may have contributed to the lack of correspondence with the expected trend. The evidence supporting the third hypothesis indicates that this might indeed be what was occurring.

The final hypothesis stated that the inclusion of elements of the traditional indigenous culture in a sports activity will result in strategies of cultural adaptation characterized by a move towards cultural fusion. The achievement orientation scores of the male organized sport participants which were significantly higher than the male TEST participant scores and the significantly greater orientation of TEST participants, both male and female, towards occupations which reflect aspects of the traditional culture strongly support the acceptance of this hypothesis. Furthermore, the trend towards higher self-esteem for male and female TEST participants would tend to indicate a higher degree of congruence of perceived roles with roles which actually exist in transitional northern society.

The occupational roles available in transitional northern society and the traditional culture orientation of TEST participants may account for some of the differences

which exist between northern males and females on the various dimensions examined. A number of male roles which incorporate elements valued by the traditional culture, such as biologist, game warden and ski coach, are potentially available to male northerners who achieve successfully in the southern oriented school system. The congruence of these occupations with some traditional values regarded as important by TEST males may, to some extent, account for the increased motivation which has resulted in higher educational achievement of TEST males in comparison to their indigenous peers. It is possible that the motivation for this occurance was the result of a greater assimilation of southern values by the male TEST participants but there was no other evidence supporting this view. In any event, a greater proportion of TEST males (76.3%) did not aspire to an education past grade twelve, whereas their indigenous peers had a greater orientation (52.8%) towards higher education.

For the females, the only roles congruent with the traditional culture, were the roles of wife and mother. The lack of culturally oriented alternatives may account for the large number of TEST females (60%) who were undecided with respect to an occupation while their indigenous peers had largely selected occupations (65.8%) with southern or post-secondary educational orientations. The lower scores of the TEST females on the indices of professionalization and their aspired status mobility support the view that the TEST females

were more strongly tied to the north than their indigenous peers. They were possibly experiencing a greater degree of conflict than TEST males in their attempts to find a satisfactory role in the transitional northern society.

The findings of the study suggested that the participation of young male indigenes of the Mackenzie Delta in organized sport programs reflecting southern values towards achievement and competition resulted in a greater degree of assimilation of these values by the participants. The fact that a corresponding assimilation did not occur among female indigenous participants is possibly a result of the lack of acceptable female roles reflecting these values.

Programs with an increased orientation towards using sport participation as a vehicle of acculturation stressing the assimilation of southern value structures did not appear to result in a corresponding increase in the assimilation of these values. The fact that the program with this more intense orientation incorporated an activity oriented towards the traditional indigenous culture seems to have resulted in acculturation processes emphasizing cultural fusion rather than assimilation.

Conclusions

This study indicates that participation in organized sport programs resulted in acculturative changes among the participants of these programs. The particular strategies of

adaptation selected appeared to be influenced by the cultural orientations of the activities used in the programs while the degree to which acculturative changes can be observed was dependent on the range of acceptable social roles existing which reflect the acculturative orientations of the participants.

Recommendations

The outcome of the present study suggested the following as meaningful directions for further research:

1. A long range study of the indigenous sport participants in these programs would be particularly useful in substantiating the findings and conclusions suggested by the data obtained in this study.

2. The inclusion of value and attitude indices with a more inclusive study of personality variables would provide a clearer picture of the changes which are occurring.

3. The examination of participation in organized sport programs in other acculturative situations would provide the basis from which to draw greater generalizations concerning the impact of sport participation on acculturative processes.

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APPENDICES

APPENDIX A

PARTICIPATION QUESTIONNAIRE

Instructions: Please answer each question in the space provided.

1. NAME: _____ ETHNIC GROUP _____

2. SEX: MALE _____ FEMALE _____

3. HOME ROOM TEACHER: _____

4. GRADE: _____

5. AGE: _____

6. a. Have you ever participated in the T.E.S.T. cross country ski program: YES _____ NO _____.

   b. Are you in the T.E.S.T. cross country ski program this year? YES _____ NO _____

   c. Do you think you will join the T.E.S.T. cross country ski program next year? YES _____ NO _____

7. a. Have your ever participated or competed in any organized sport? (For example: any school team, any community team, The T.E.S.T. Ski Program). YES _____ NO _____

   b. What sport or sports were they:

      1. _____

      2. _____

      3. _____

8. a. Are you participating in any organized sports this year? Yes _____ NO _____

b. Which sport or sports are they?

1._____

2._____

3._____

9. a. Do you think you will participate in any organized sport next year? YES_____NO_____

b. Which sport or sports might they be?

1. _____

2. _____

3. _____

APPENDIX B

AM SCALE

	Agree	Disagree
1. Even though parents often seem strict, when a person gets older he will realize it was better for him.	_____	_____
2. If my parents told me to stop seeing friend of my own sex, I'd see that friend anyway.	_____	_____
3. Parents seem to believe that you can't take the opinion of a teenager seriously.	_____	_____
4. Parents would be greatly upset if their son ended up as a garbage collector or sidewalk shoveler or delivery boy.	_____	_____
5. All I want out of life in the way of a full time job is a secure, not to hard job, with enough pay to afford a skidoo and outboard and eventually a nice place to live.	_____	_____
6. When a man is born everything he will do or that will happen to him is determined, so he might just as well accept it and not fight against it.	_____	_____
7. It is silly to spend your money now when the money could be used for a skidoo or a canoe and kicker.	_____	_____
8. The best kind of job is one where you are part of a team all working together, even if you don't get individual praise.	_____	_____
9. Even when teenagers get married, their strongest feelings still belongs to their mother and father.	_____	_____

	Agree	Disagree
10. Education and learning are more important in making a person happy than money and the things it will buy.	_____	_____
11. When the time comes for a person to take a job, they should stay near their parents even if it means giving up a good job.	_____	_____
12. Planning only makes a person unhappy since your plans hardly ever work out anyway.	_____	_____
13. Nowadays with world problems the way they are, the wise person lives for today and lets tomorrow take care of itself.	_____	_____
14. Nothing in life is worth the sacrifice of moving away from your parents.	_____	_____

APPENDIX C

SELF AND OTHER

1. "Who Am I?": Everyone has a mental picture of himself or herself. What words would you use to describe who you are and what you are?

1. _____ 6. _____

2. _____ 7. _____

3. _____ 8. _____

4. _____ 9. _____

5. _____ 10. _____

2. Future Plans:

(a) How far do you want to go in school: E.g. Grade 10 High School or University? Please indicate here:

_____

_____

(b) Do you have a job or occupation that you have decided on for your future career? If so, please write it here:

_____

_____

(c) Below are listed a number of possible occupations. Please rate these jobs in terms of how you like them. Rate the job you prefer most a (1) and the job you prefer least a (10). Girls do the "Girls" list and boys do the "Boys" list.

GIRLS

Occupation	Rating
Doctor	_____
Housewife	_____

GIRLS

Occupation	Rating
Nursing	_____
Psychologist	_____
Secretary	_____
Social Worker	_____
Teacher	_____
Technician	_____
Telephone operator	_____
Waitress	_____

BOYS

Occupation	Rating
Armed Forces	_____
Bush Pilot	_____
Construction Work	_____
Doctor	_____
Heavy Equipment Operator	_____
Mechanic	_____
Professional Athlete	_____
Technician	_____
Trapper	_____
Wildlife Biologist	_____

3. Interests, Likes and Dislikes

(a) Below are listed a number of activities. Please rate these in order of importance to you. Use a (1) for most important and a (5) for least important.

	Importance to you	Important to the "Leading Crowd".
Being with friends	_____	_____
School clubs	_____	_____
School work	_____	_____
Skiing	_____	_____
Other Sports (Specify)	_____	_____

_____

_____

_____

(b) In most schools there are students who other students look up to or admire because they are involved in certain activities. In your school, how important to this "leading crowd" are the activities listed above in 3(a). Please rate them (1) to (5), in the column on the right of in 3(a) above.

(c) Below are listed a number of winter sports. Of all your interests and activities what are those that are most important to you? (5= excellent; 4=good; 3=average; 2=poor; 1=very poor).

	(i) Importance	(ii) Partici-pation	(iii) Self-Rating
Basketball	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Hunting and Trapping	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1

	(i) Importance	(ii) Participation	(iii) Self-Rating
Skating and Hockey	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Skiing	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Volleyball	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Other sports you like, add here:			
_____	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
_____	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
_____	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1

(i) In the column marked "Importance" rank how important each activity is to you from (5) to (1).

(ii) In column marked "Participation" indicate how much you participate in each sport by ranking from (5) to (1).

(iii) How good are you at each of these sports. Please rate yourself by circling the appropriate number above.

(d) Who are the people you admire or respect in amateur or professional sport?

(i) Please list five

1. _____
2. _____
3. _____
4. _____
5. _____

(ii) Please rank from (1) to (5) the following sports people in order of importance to you.

	Importance
Lew Alcindor	_____
Ken Dryden	_____
Sharon Firth	_____
Fred Kelly	_____
Karen Magnesson	_____

4. How good do you feel the cross country skiers like: Please check ( ) your answer.

Shirley and Sharon Firth Roger Allen Fred Kelly	Best in world ( ); Best in North America ( ); Best in Canada ( ); Average in Canada ( ); Below Average in Canada ( ).

5. What do you think is most important in playing a game? Place a "1" next to the one you think is most important, a "2" for the second most important and a "3" for the least important.

_____ to play as well as you can

_____ to beat the other player or team

_____ to play the game fairly.

APPENDIX D

SES SCALE

The following questions explain themselves. Read each carefully, then place an X opposite the best statement for you. There is no "right" answer. It is your opinion that counts.

1. I am able to do things as well as most other people.
   1. _____ Strongly agree
   2. _____ Agree
   3. _____ Disagree
   4. _____ Strongly disagree

2. I wish I could have more respect for myself.
   1. _____ Strongly agree
   2. _____ Agree
   3. _____ Disagree
   4. _____ Strongly disagree.

3. I take a positive attitude toward myself.
   1. _____ Strongly agree
   2. _____ Agree
   3. _____ Disagree
   4. _____ Strongly disagree.

4. All in all, I am inclined to feel that I am a failure.
   1. _____ Strongly agree
   2. _____ Agree
   3. _____ Disagree
   4. _____ Strongly disagree

5. I feel that I'm a person of worth, at least as good as others.

   1. _____ Strongly agree
   2. _____ Agree
   3. _____ Disagree
   4. _____ Strongly disagree.

6. I feel I do not have much to be proud of.

   1. _____ Strongly agree
   2. _____ Agree
   3. _____ Disagree
   4. _____ Strongly disagree.

7. I feel that I have a number of good qualities.

   1. _____ Strongly agree
   2. _____ Agree
   3. _____ Disagree
   4. _____ Strongly disagree.

8. I certainly feel useless at times.

   1. _____ Strongly agree
   2. _____ Agree
   3. _____ Disagree
   4. _____ Strongly disagree.

9. On the whole, I am satisfied with myself.

   1. _____ Strongly agree
   2. _____ Agree
   3. _____ Disagree
   4. _____ Strongly disagree.

10. At times I think I am no good at all.

   1. _____ Strongly agree
   2. _____ Agree
   3. _____ Disagree
   4. _____ Strongly disagree.

APPENDIX E

WHAT YOU DO AND WHAT YOU THINK

Read each statement and mark an X on the side that fits you better. Some questions will not have the words just the way you want them but mark every one the best you can. You may ask for help if you don't know a word. Just raise your hand and the teacher will come to your desk. Do not work long on one question. Mark it and go on to the next one. MARK EVERY ONE.

1.	When visiting a new building do you like to have someone show you around?	- or -	do you like to find your own way
2.	When a child laughs at you do you feel badly?	- or -	do you laugh too
3.	Does your mother think you are too lively and restless?	- or -	quiet and calm
4.	Do you work slowly?	- or -	quickly
5.	Do you have many friends?	- or -	just a few good friends.
6.	Do you finish your school work quickly?	- or -	does it take you too long
7.	When losing a game, do you sometimes give up and save your energy?	- or -	always play harder
8.	If the teacher lets another child do a job you want to do, do you feel badly?	- or -	soon forget about it
9.	Do you find other children take advantage of you?	- or -	are they kind to you
10.	Do people like your ideas?	- or -	do they not like them

11. Does your teacher think you are good at sitting still?	- or -	that you run around too much
12. Would you rather hunt birds?	- or -	draw pictures of birds.
13. Would you rather talk with your teacher?	- or -	talk with a good friend
14. Would you like better to have bears here now?	- or -	to hear stories about bears
15. Is mother's way of doing things always better?	- or -	or is your own new way sometimes better
16. Would you rather be a school teacher?	- or -	a great hunter
17. When playing do you make a lot of noise?	- or -	play quietly, without so much noise
18. Would you rather write a book	- or -	be the main actor in a play
19. When you get a new game as a present, do you like to try it first yourself?	- or -	have someone show you how to play it
20. If teacher scolded you badly, would you cry when you told mother?	- or -	or just laugh when you told her.

APPENDIX F

HSPQ (A+E)

The following questions are about your interests and your likes and dislikes. There are no right or wrong answers. Each person is different and you should say only what is true for you. Indicate your answer to each question by circling the letter "a" or "b" or "c".

When answering the questions, keep these four points in mind:

1. Answer truthfully and frankly.
2. Give the first natural answer that comes to you.
3. Use the middle answer only when it is impossible to decide on one of the other choices.
4. Answer every question, somehow.

1. At a picnic would you rather spend some time:
   (a) exploring the woods alone
   (b) uncertain
   (c) playing around the campfire with the crowd.

2. In a group discussion, do you like to tell what you think

   (a) yes
   (b) sometimes
   (c) no

3. Have you enjoyed being in drama, such as school plays?

   (a) yes (b) uncertain (c) no

4. Do you feel hurt if people borrow your things without asking you?

   (a) yes (b) perhaps (c) no

5. In dancing or music, do you pick up a new rhythm easily?

   (a) yes (b) sometimes (c) no

6. In talking with your classmates, do you dislike telling your most private feelings?

   (a) yes (b) sometimes (c) no

7. When you go into a new group, do you:

   (a) quickly feel you know everyone
   (b) in between
   (c) take a long time to get to know people.

8. Would you rather live:

   (a) in a deep forest, with only the song of the birds.
   (b) uncertain
   (c) on a busy street corner, where a lot happens.

9. If friends' ideas differ from yours, do you keep from saying yours are better, so as not to hurt their feelings?

   (a) yes (b) sometimes (c) no

10. Do you usually ask someone else to help you when you have a hard problem.

    (a) yes (b) sometimes (c) no

11. When you finish school, would you like to:

    (a) do something that will make people like you, though you are poor
    (b) uncertain
    (c) make a lot of money

12. Are there times when you feel so please with the world that you just have to sing and shout?

    (a) yes (b) perhaps (c) no

13. If you accidentally say something odd in company, do you stay uncomfortable a long time and find it hard to forget.

    (a) yes (b) perhaps (c) no

14. Which would you rather read about:

    (a) how to win at basketball
    (b) uncertain
    (c) how to be nice to everyone

15. Would you rather be:

    (a) a teacher
    (b) uncertain
    (c) scientist

16. On your birthday, do you prefer:

(a) to be asked before-hand to choose the present you want
(b) uncertain
(c) to have the fun of getting a present that's a complete surprise.

APPENDIX G

PERSONAL IMPRESSIONS OF CONDUCTING RESEARCH IN THE CANADIAN NORTH

The fieldwork of this study undertaken in conjunction with the evaluation of the TEST program provided impressions and insights with respect to conducting research in the north. The first was the warmth and graciousness of the welcome and hospitality extended by northerners, both indigenes and non-indigenes, to all of the researchers associated with this project. This goodwill was reflected in the cooperation and assistance which was given without which it would have been impossible to collect meaningful data.

This goodwill was all the more surprising considering the degree of resentment of northerners towards researchers from the south, who have used southern solutions and values and apparently ignored the values and needs of northerners. The fact that this resentment existed was evident in a number of situations in which various members of our group were accosted with blunt statements about southern interference in the northern way of life and in a number of discussions in which northerners, particularly indigenous northerners, took the time to explain their point of view and their concerns.

It seems that to operate effectively in the northern environment, particularly in research concerned with social, anthropological and psychological dimensions, the researcher must be open to this input if an understanding of the social realities of the situation are to be gained. It is useful and probably necessary to be concerned with the needs which the northerners feel are important. It is even more important to take the time to explain how the research is related to these needs and to provide feedback of results as quickly as possible.

It appears that the best way to accomplish the above is to take time to become involved in activities which are not directly related to the research and take the time to interact with the local people. In this way it seems that the cooperation needed to obtain accurate data and the understanding necessary for meaningful interpretation can be obtained.